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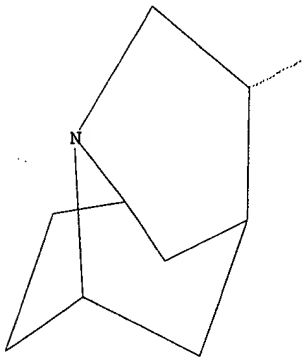
(FILE 'HOME' ENTERED AT 11:26:43 ON 03 SEP 2002)

FILE 'REGISTRY' ENTERED AT 11:26:49 ON 03 SEP 2002
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 158 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:27:47 ON 03 SEP 2002
L4 31 S L3

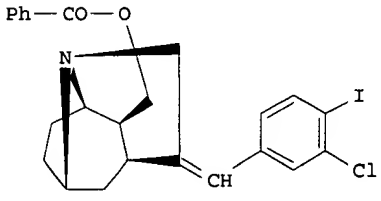
=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> d 1-31 bib abs hitstr

L4 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 2002:229578 CAPLUS
DN 136:395331
TI Further Studies on Conformationally Constrained Tricyclic Tropane Analogues and Their Uptake Inhibition at Monoamine Transporter Sites: Synthesis of (Z)-9-(Substituted arylmethylene)-7-azatricyclo[4.3.1.03,7]decanes as a Novel Class of Serotonin Transporter Inhibitors
AU Zhang, Ao; Zhou, Guochun; Hoepping, Alexander; Mukhopadhyaya, Jayanta; Johnson, Kenneth M.; Zhang, Mei; Kozikowski, Alan P.
CS Drug Discovery Program, Department of Neurology, Georgetown University Medical Center, Washington, DC, 20007-2197, USA
SO Journal of Medicinal Chemistry (2002), 45(9), 1930-1941
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
GI



I

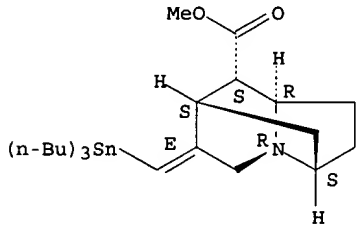
AB A novel series of conformationally constrained tricyclic tropane analogs, (Z)-9-(substituted arylmethylene)-7-azatricyclo[4.3.1.03,7]decanes, were prepd., and their abilities to inhibit high-affinity uptake of dopamine

(DA), serotonin (5-HT), and norepinephrine (NE) into rat brain nerve endings (synaptosomes) were evaluated. First, a systematic screening of a variety of different substituents on the Ph ring indicated that the substitution pattern plays an important role in the monoamine transporter activity. Most compds. in this series possessed a very low activity at the DA transporter (DAT) but a good to excellent affinity for the 5-HT transporter (SERT). In the case of para-substituted Ph analogs, the electronic character of the substituent did not affect uptake inhibition as dramatically as obsd. in some benztropine analogs. Among these compds., the 4-bromophenyl and 4-isopropylphenyl analogs exhibited the highest potency at the SERT with a Ki value of 10 nM. In the 3,4-disubstituted Ph series, even more potent and highly selective compds. were discovered. The 4-bromo-3-chlorophenyl deriv. has a Ki value of 2.3 nM for uptake inhibition at the SERT, a DAT/SERT uptake ratio of 2360, and a NET/SERT uptake ratio of 200. The 3-chloro-4-iodophenyl deriv. exhibited a Ki value of 1.8 nM for uptake inhibition at the SERT, a DAT/SERT uptake ratio of 1740, and a NET/SERT uptake ratio of 151. These compds. are 3-4-fold more potent than the antidepressant medication fluoxetine, and the selectivities for SERT over DAT and NET are also better than those of fluoxetine. Second, a variety of functional modifications on the ester moiety were investigated. Substitution by other esters or amides as well as alkenes did not increase potency, while most of the acetates or benzoates and a ketone exhibited significantly improved activity. A good hydrogen-bonding ability of the substituent is believed to be required for high activity. The most potent and selective ligand is compd. I, which displayed a Ki value of 0.06 nM and has essentially no activity at the DAT or NET. The present results have important implications for drug addiction as well as a no. of psychiatric diseases.

IT **275355-51-6P 310900-11-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(byproduct; conformationally constrained tricyclic tropane analogs: prepn. and effect on dopamine, serotonin and norepinephrine uptake into brain nerve endings)

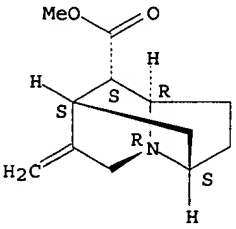
RN 275355-51-6 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(tributylstannyl)methylene]-, methyl ester, (3S,4R,6E,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 310900-11-9 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-methylene-, methyl ester, (3S,4R,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



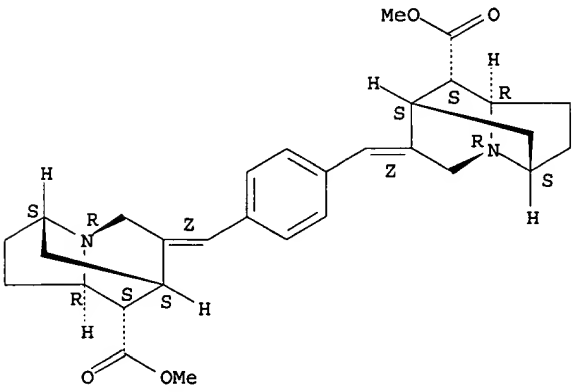
IT **428854-49-3P**
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(conformationally constrained tricyclic tropane analogs: prepn. and effect on dopamine, serotonin and norepinephrine uptake into brain

nerve endings)

RN 428854-49-3 CAPLUS

CN 3,7-Methanoindolizine-8-carboxylic acid, 6,6'-(1,4-phenylenedimethylidyne)bis[octahydro-, dimethyl ester, (3S,3'S,4R,4'R,6Z,6'Z,7S,7'S,8S,8'S,8aR,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

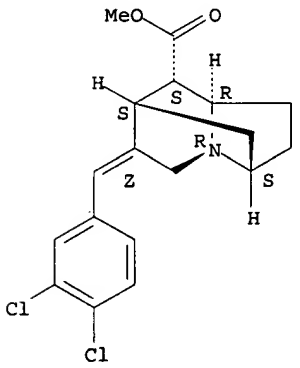


IT **275355-56-1P 428854-54-0P 428854-60-8P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(conformationally constrained tricyclic tropane analogs: prepn. and effect on dopamine, serotonin and norepinephrine uptake into brain nerve endings)

RN 275355-56-1 CAPLUS

CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,4-dichlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

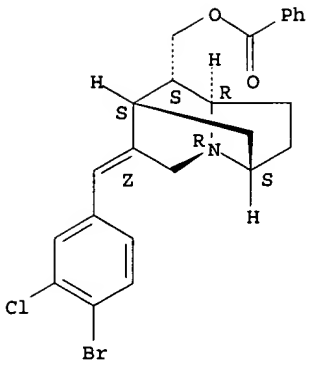
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 428854-54-0 CAPLUS

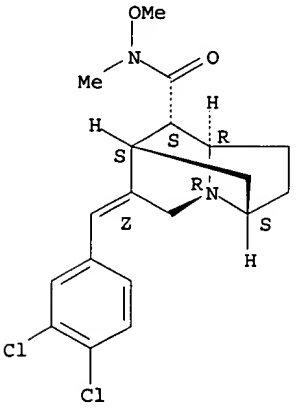
CN 3,7-Methanoindolizine-8-methanol, 6-[(4-bromo-3-chlorophenyl)methylene]octahydro-, benzoate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



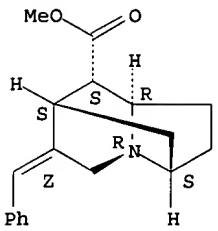
RN 428854-60-8 CAPLUS
CN 3,7-Methanoindolizine-8-carboxamide, 6-[(3,4-dichlorophenyl)methylene]octa hydro-N-methoxy-N-methyl-, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



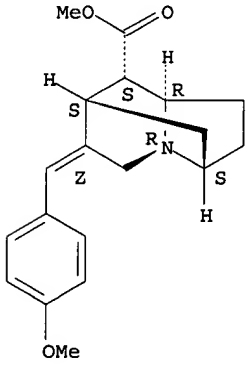
IT **275355-52-7P 275355-57-2P 275355-58-3P**
275355-59-4P 275355-65-2P 428854-48-2P
428854-52-8P 428854-53-9P 428854-56-2P
428854-57-3P 428854-59-5P 428854-61-9P
428854-62-0P 428854-63-1P 428854-64-2P
428854-65-3P 428854-66-4P 428854-67-5P
428854-68-6P 428854-69-7P 428854-70-0P
428854-71-1P 428854-72-2P 428854-73-3P
428854-74-4P 428854-75-5P 428854-76-6P
428854-77-7P 428854-79-9P 428854-81-3P
428854-82-4P 428854-83-5P 428854-84-6P
428854-85-7P 428854-86-8P 428854-87-9P
428854-88-0P 428854-89-1P 428854-90-4P
428854-91-5P 428854-92-6P 428854-93-7P
428854-94-8P 428854-95-9P 428854-96-0P
428854-97-1P 428854-98-2P 428854-99-3P
428855-00-9P 428855-01-0P 430446-69-8P
430446-74-5P 430446-79-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(conformationally constrained tricyclic tropane analogs: prepn. and effect on dopamine, serotonin and norepinephrine uptake into brain nerve endings)
RN 275355-52-7 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(phenylmethylene)-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



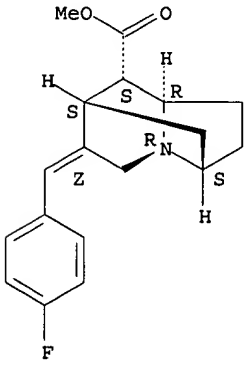
RN 275355-57-2 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(4-methoxyphenyl)methylene]-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



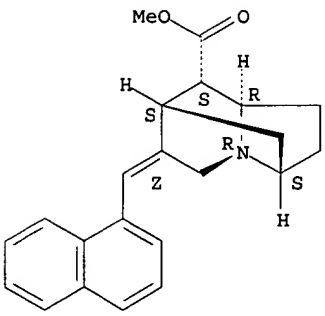
RN 275355-58-3 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(4-fluorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



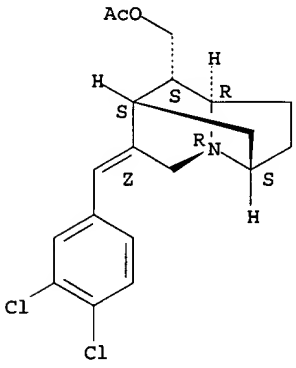
RN 275355-59-4 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(1-naphthalenylmethylene)-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



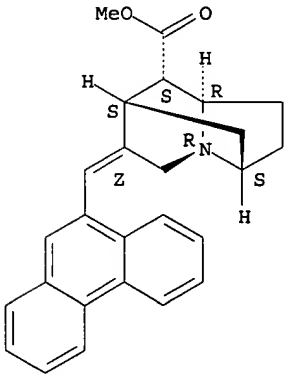
RN 275355-65-2 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[(3,4-dichlorophenyl)methylene]octahyd
ro-, acetate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 428854-48-2 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(9-
phenanthrenylmethylene)-, methyl ester, hydrochloride,
(3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

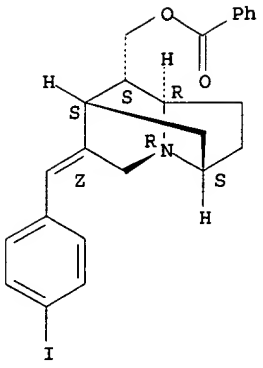
Absolute stereochemistry.
Double bond geometry as shown.



● HCl

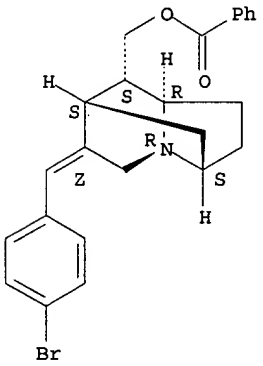
RN 428854-52-8 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, octahydro-6-[(4-iodophenyl)methylene]-,
benzoate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



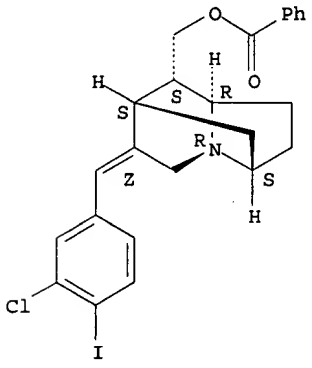
RN 428854-53-9 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[(4-bromophenyl)methylene]octahydro-, benzoate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



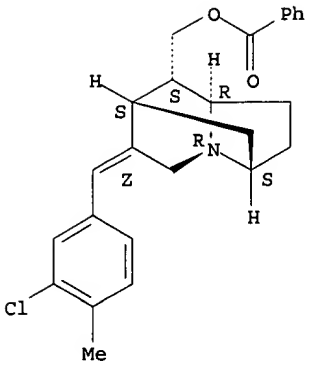
RN 428854-56-2 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[(3-chloro-4-iodophenyl)methylene]octahydro-, benzoate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



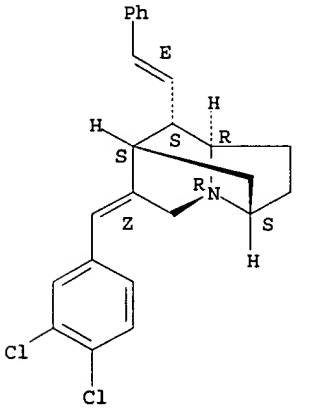
RN 428854-57-3 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[(3-chloro-4-methylphenyl)methylene]octahydro-, benzoate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



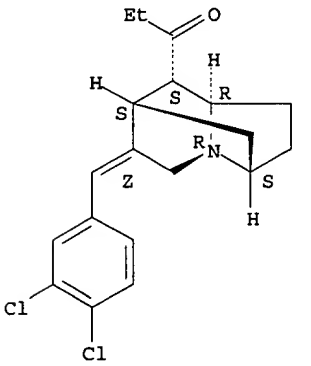
RN 428854-59-5 CAPLUS
CN 3,7-Methanoindolizine, 6-[(3,4-dichlorophenyl)methylene]octahydro-8-[(1E)-2-phenylethenyl]-, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 428854-61-9 CAPLUS
CN 1-Propanone, 1-[(3S,4R,6Z,7S,8S,8aR)-6-[(3,4-dichlorophenyl)methylene]octahydro-3,7-methanoindolizin-8-yl]- (9CI) (CA INDEX NAME)

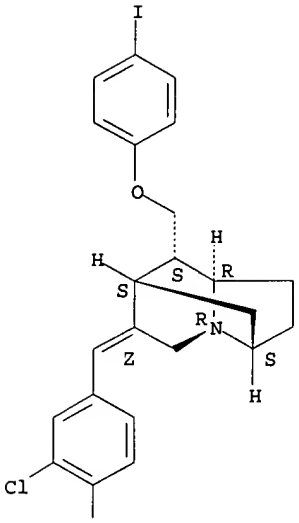
Absolute stereochemistry.
Double bond geometry as shown.



RN 428854-62-0 CAPLUS
CN 3,7-Methanoindolizine, 6-[(3,4-dichlorophenyl)methylene]octahydro-8-[(4-iodophenoxy)methyl]-, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

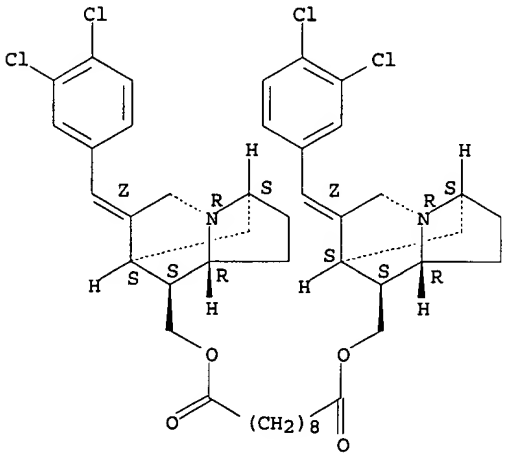
PAGE 1-A



PAGE 2-A

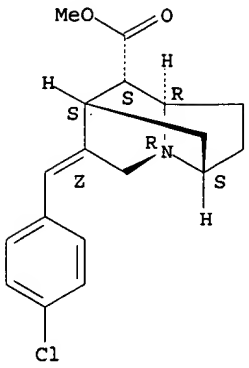
RN 428854-63-1 CAPLUS
CN Decanedioic acid, bis[[(3S,4R,6Z,7S,8S,8aR)-6-[(3,4-dichlorophenyl)methylene]octahydro-3,7-methanoindolizin-8-yl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



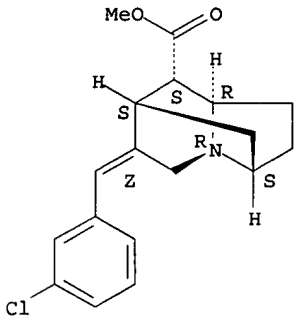
RN 428854-64-2 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(4-chlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



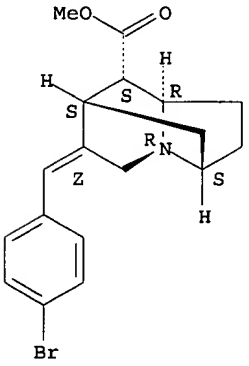
RN 428854-65-3 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3-chlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



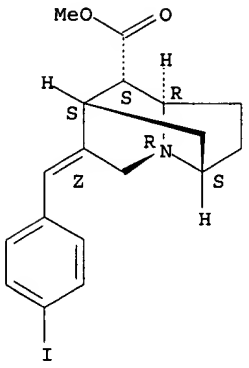
RN 428854-66-4 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(4-bromophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



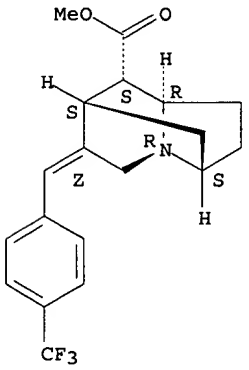
RN 428854-67-5 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(4-iodophenyl)methylene]-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



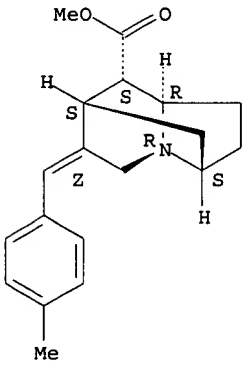
RN 428854-68-6 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[[4-(trifluoromethyl)phenyl]methylene]-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



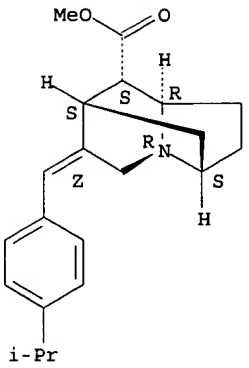
RN 428854-69-7 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(4-methylphenyl)methylene]-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



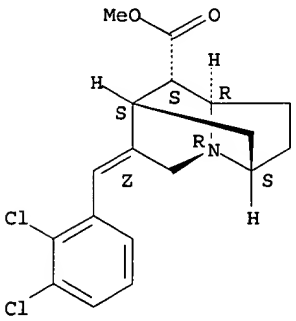
RN 428854-70-0 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[[4-(1-methylethyl)phenyl]methylene]-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



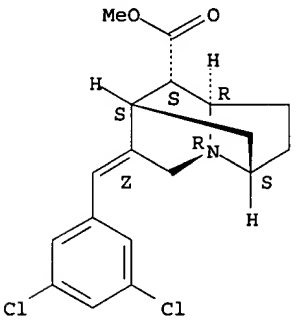
RN 428854-71-1 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(2,3-dichlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



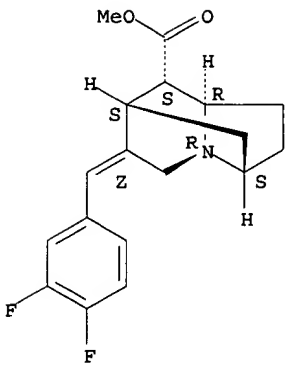
RN 428854-72-2 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,5-dichlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



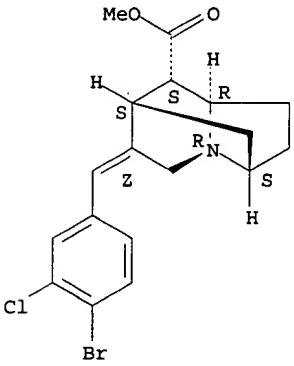
RN 428854-73-3 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,4-difluorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



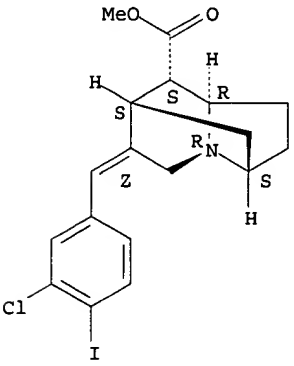
RN 428854-74-4 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(4-bromo-3-chlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



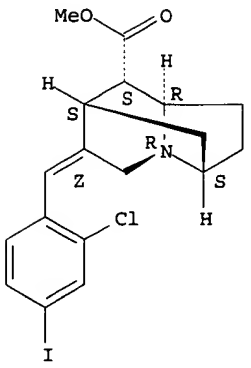
RN 428854-75-5 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3-chloro-4-iodophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



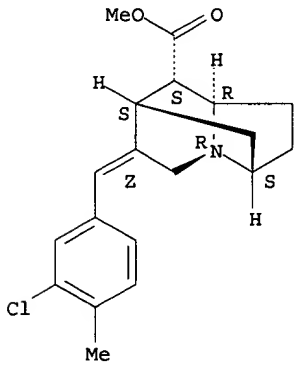
RN 428854-76-6 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(2-chloro-4-iodophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



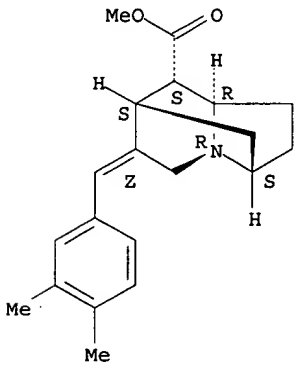
RN 428854-77-7 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3-chloro-4-methylphenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



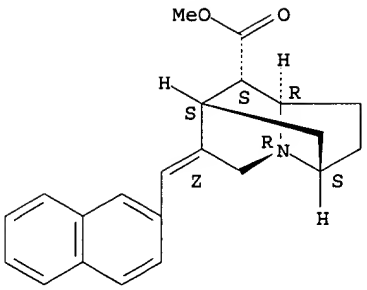
RN 428854-79-9 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,4-dimethylphenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



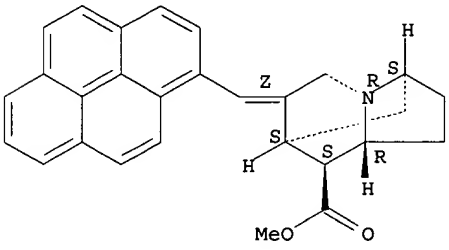
RN 428854-81-3 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(2-naphthalenylmethylene)-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



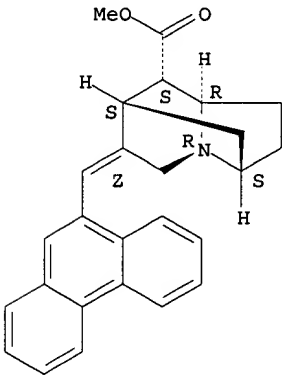
RN 428854-82-4 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(1-pyrenylmethylene)-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



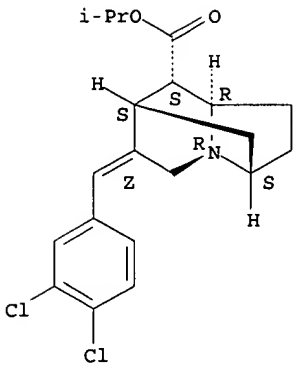
RN 428854-83-5 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(9-phenanthrenylmethylene)-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



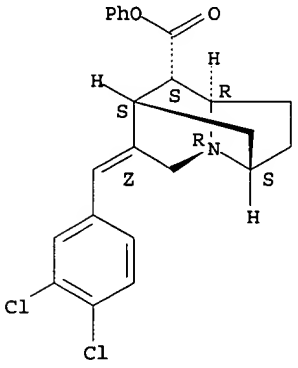
RN 428854-84-6 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,4-dichlorophenyl)methylene]octahydro-, 1-methylethyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



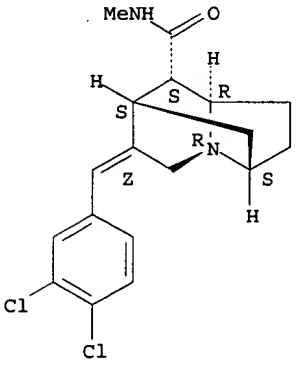
RN 428854-85-7 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,4-dichlorophenyl)methylene]octahydro-, phenyl ester, (3S,4R,6Z,7S,8S,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



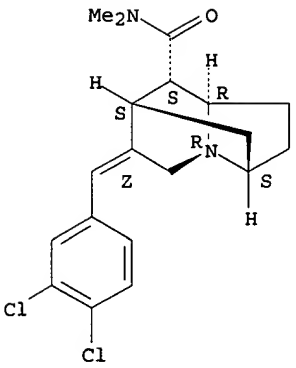
RN 428854-86-8 CAPLUS
CN 3,7-Methanoindolizine-8-carboxamide, 6-[(3,4-dichlorophenyl)methylene]octahydro-N-methyl-, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



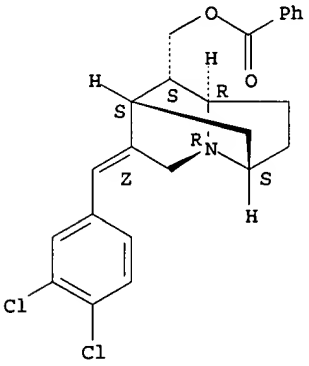
RN 428854-87-9 CAPLUS
CN 3,7-Methanoindolizine-8-carboxamide, 6-[(3,4-dichlorophenyl)methylene]octahydro-N,N-dimethyl-, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



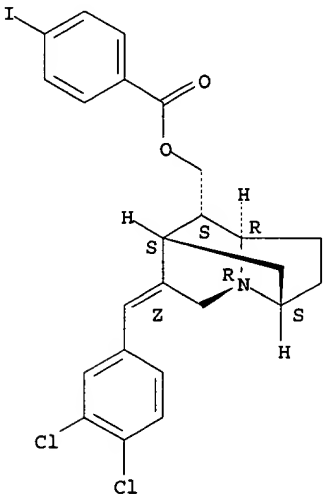
RN 428854-88-0 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[(3,4-dichlorophenyl)methylene]octahyd
ro-, benzoate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 428854-89-1 CAPLUS
CN Benzoic acid, 4-iodo-, [(3S,4R,6Z,7S,8S,8aR)-6-[(3,4-
dichlorophenyl)methylene]octahydro-3,7-methanoindolizin-8-yl]methyl ester
(9CI) (CA INDEX NAME)

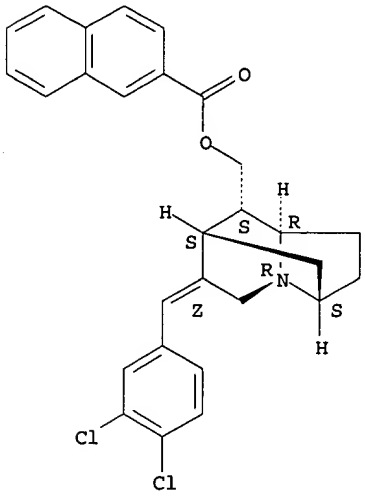
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 428854-90-4 CAPLUS
CN 2-Naphthalenecarboxylic acid, [(3S,4R,6Z,7S,8S,8aR)-6-[(3,4-
dichlorophenyl)methylene]octahydro-3,7-methanoindolizin-8-yl]methyl ester

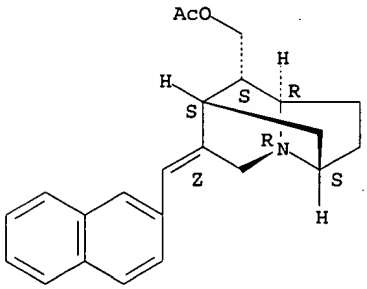
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



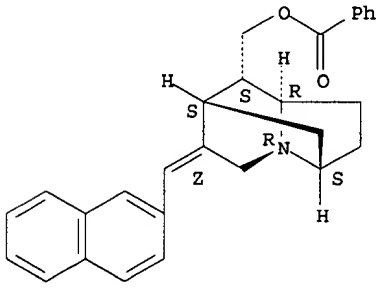
RN 428854-91-5 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, octahydro-6-(2-naphthalenylmethylene)-, acetate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 428854-92-6 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, octahydro-6-(2-naphthalenylmethylene)-, benzoate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 428854-93-7 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[(3-chlorophenyl)methylene]octahydro-, acetate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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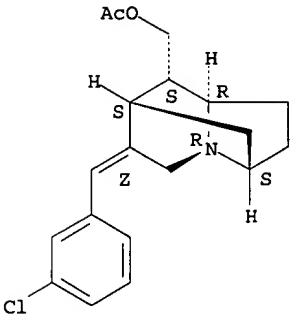
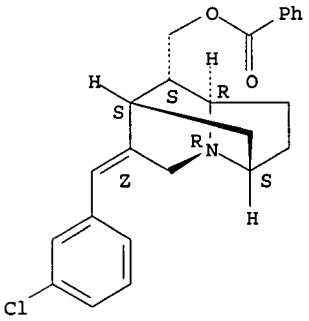
Double bond geometry as shown.



RN 428854-94-8 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[(3-chlorophenyl)methylene]octahydro-, benzoate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

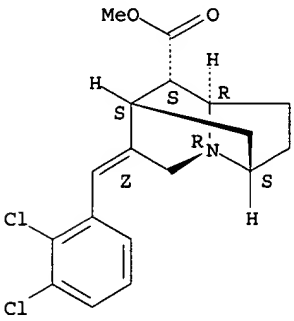


RN 428854-95-9 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(2,3-dichlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 428854-71-1
CMF C18 H19 Cl2 N O2

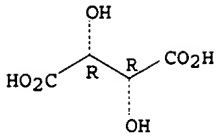
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



CM 2

CRN 87-69-4
CMF C4 H6 O6
CDES 1:R2:R*,R*

Absolute stereochemistry.

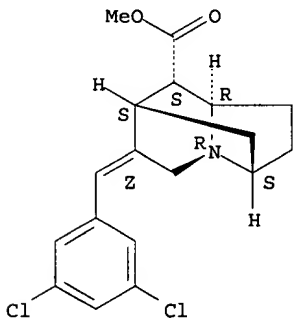


RN 428854-96-0 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,5-dichlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)-, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 428854-72-2
CMF C18 H19 Cl2 N O2

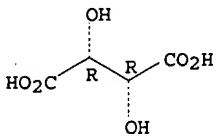
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



CM 2

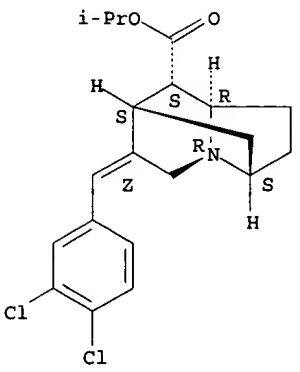
CRN 87-69-4
CMF C4 H6 O6
CDES 1:R2:R*,R*

Absolute stereochemistry.



RN 428854-97-1 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,4-dichlorophenyl)methylene]octahydro-, 1-methylethyl ester, hydrochloride, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

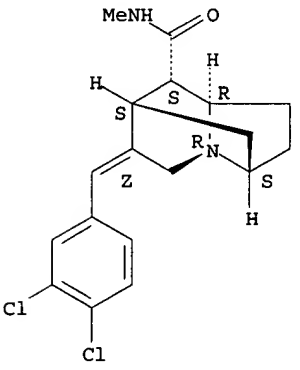
Absolute stereochemistry.
Double bond geometry as shown.



● HCl

RN 428854-98-2 CAPLUS
CN 3,7-Methanoindolizine-8-carboxamide, 6-[(3,4-dichlorophenyl)methylene]octahydro-N-methyl-, monohydrochloride, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

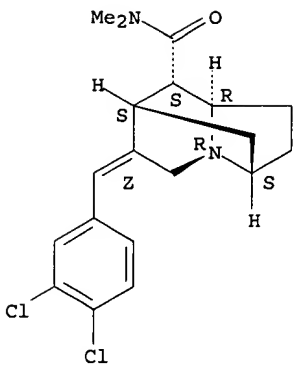
Absolute stereochemistry.
Double bond geometry as shown.



● HCl

RN 428854-99-3 CAPLUS
CN 3,7-Methanoindolizine-8-carboxamide, 6-[(3,4-dichlorophenyl)methylene]octahydro-N,N-dimethyl-, monohydrochloride, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

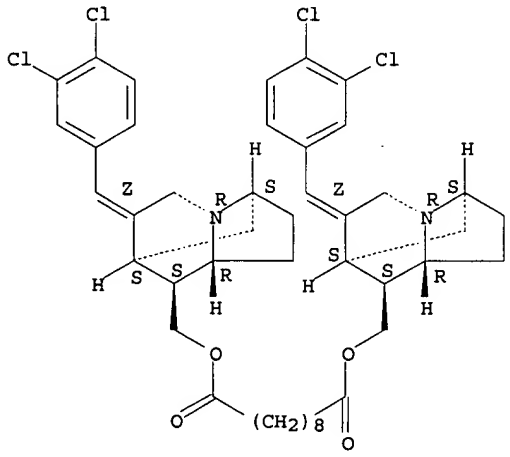


● HCl

RN 428855-00-9 CAPLUS
CN Decanedioic acid, bis[[(3S,4R,6Z,7S,8S,8aR)-6-[(3,4-dichlorophenyl)methylene]octahydro-3,7-methanoindolizin-8-yl]methyl] ester, hydrochloride (10:13) (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

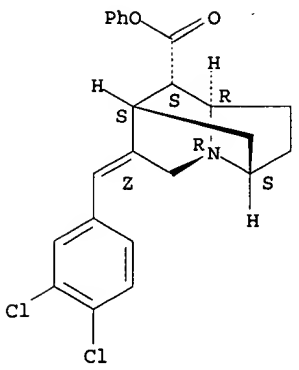


PAGE 2-A

●13/10 HCl

RN 428855-01-0 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,4-dichlorophenyl)methylene]octahydro-, phenyl ester, hydrochloride, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

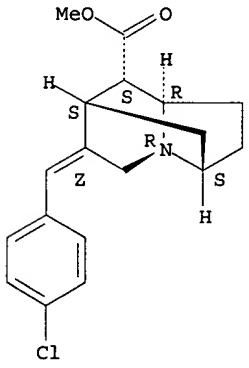
Absolute stereochemistry.
Double bond geometry as shown.



● HCl

RN 430446-69-8 CAPLUS
CN 3,7-Methanoindolizine-9-carboxylic acid, 6-[(4-chlorophenyl)methylene]octahydro-, methyl ester, hydrochloride, (3R,4R,6Z,7S,8aS,9S)- (9CI) (CA INDEX NAME)

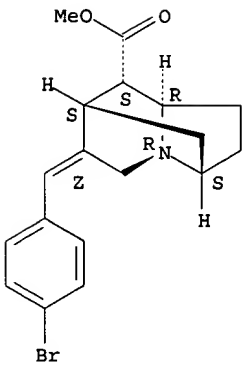
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



● HCl

RN 430446-74-5 CAPLUS
CN 3,7-Methanoindolizine-9-carboxylic acid, 6-[(4-bromophenyl)methylene]octahydro-, methyl ester, hydrochloride, (3R,4R,6Z,7S,8aS,9S)- (9CI) (CA INDEX NAME)

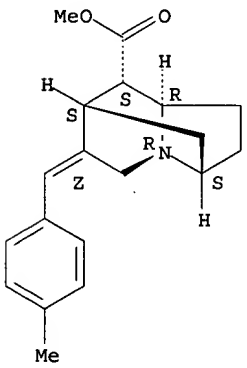
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



● HCl

RN 430446-79-0 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(4-methylphenyl)methylene]-, methyl ester, hydrochloride, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

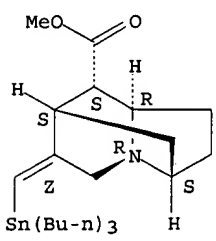
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



● HCl

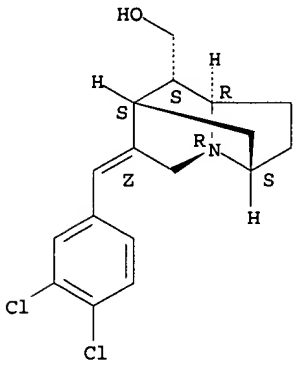
IT **275355-50-5P 275355-64-1P 428854-50-6P 428854-51-7P 428854-55-1P 428854-58-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(conformationally constrained tricyclic tropane analogs: prepn. and effect on dopamine, serotonin and norepinephrine uptake into brain nerve endings)
RN 275355-50-5 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(tributylstannyl)methylene]-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



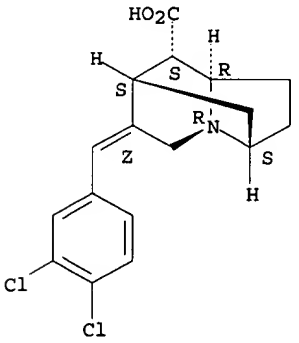
RN 275355-64-1 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[(3,4-dichlorophenyl)methylene]octahydro-, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



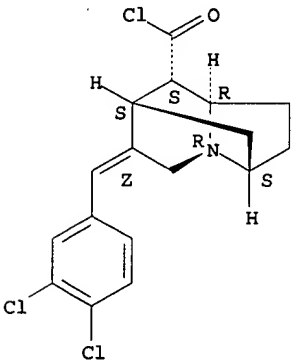
RN 428854-50-6 CAPLUS
CN 3,7-Methanoindolizine-9-carboxylic acid, 6-[(3,4-dichlorophenyl)methylene]octahydro-, (3R,4R,6Z,7S,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 428854-51-7 CAPLUS
CN 3,7-Methanoindolizine-9-carbonyl chloride, 6-[(3,4-dichlorophenyl)methylene]octahydro-, (3R,4R,6Z,7S,8aS,9S)- (9CI) (CA INDEX NAME)

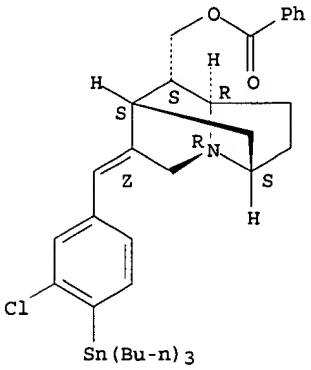
Absolute stereochemistry.
Double bond geometry as shown.



RN 428854-55-1 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[[3-chloro-4-

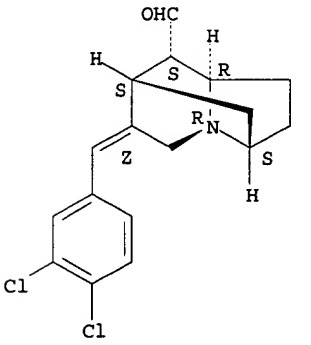
(tributylstannyl)phenyl]methylene]octahydro-, benzoate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 428854-58-4 CAPLUS
CN 3,7-Methanoindolizine-8-carboxaldehyde, 6-[(3,4-dichlorophenyl)methylene]octahydro-, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



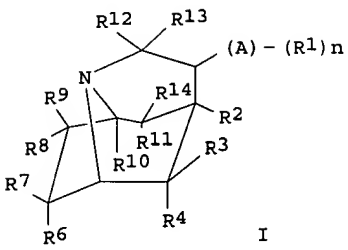
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 2001:247335 CAPLUS
DN 134:266474
TI preparation of tropane analogs capable of acting as inhibitors of reuptake of monoamines
PA Georgetown University, USA; Kozikowski, Alan P.; Hoepping, Wolfgang Alexander
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

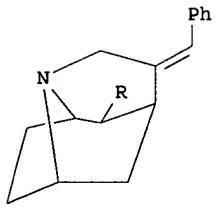
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001023385	A2	20010405	WO 2000-US26566	20000927
	WO 2001023385	A3	20020124		
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1220854	A2	20020710	EP 2000-966965	20000927
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
PRAI	US 1999-156275P	P	19990927		
	WO 2000-US26566	W	20000927		

OS MARPAT 134:266474
GI

this appl



I



II

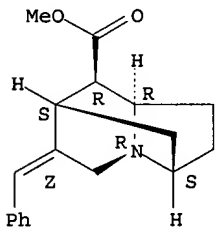
AB Tropanes I [A = single bond or double bond; n = 2, 3; R1 = H, aryl, cycloalkyl, alkenyl, alkynyl; R2-R13 = H, alkyl, aryl, alkoxy, acyl, amino, sulfonyl; R14 = alkyl, aryl, ketone, oxime, CO2H, CHO, phosphoryl], were prepd. and formulated for treating disorders caused by a deficiency in monoamine concn. and/or modulation of serotonin uptake, such as drug addiction, depression or parkinson disease. Thus, (1R,5S)-tropane II (R = CO2Me) was prepd. starting from cocaine via demethylation, alkylation with propargyl bromide, sapon., dehydration, cyclization, and followed by reaction with iodobenzene. Prepd. compds. were tested for dopamine and serotonin transporter activity and were useful for medical therapy and diagnosis. Pharmaceutical compns. comprising of I and a pharmaceutically acceptable carrier, and methods for treating conditions in which inhibition of reuptake of monoamines is desired, were also reported.

IT **331812-19-2P 331812-20-5P 331812-21-6P**
331812-22-7P 331812-23-8P 331812-24-9P
331812-25-0P 331812-26-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and formulation of tropane analogs as inhibitors of reuptake of monoamines)

RN 331812-19-2 CAPLUS

CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(phenylmethylene)-, methyl ester, (3S,4R,6Z,7S,8R,8aR)- (9CI) (CA INDEX NAME)

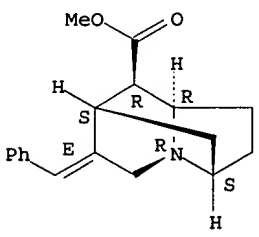
Absolute stereochemistry.
Double bond geometry as shown.



RN 331812-20-5 CAPLUS

CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(phenylmethylene)-, methyl ester, (3S,4R,6E,7S,8R,8aR)- (9CI) (CA INDEX NAME)

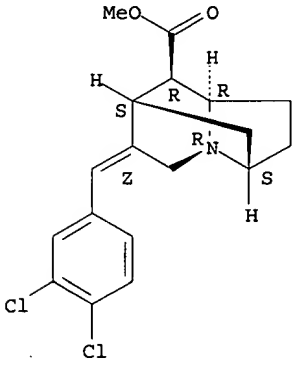
Absolute stereochemistry.
Double bond geometry as shown.



RN 331812-21-6 CAPLUS

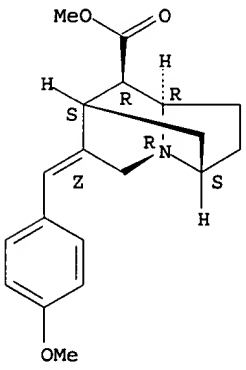
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,4-dichlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8R,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



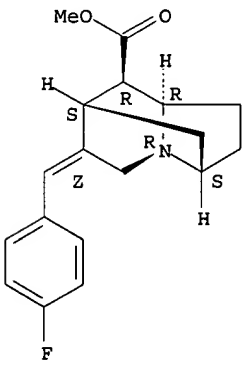
RN 331812-22-7 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(4-methoxyphenyl)methylene]-, methyl ester, (3S,4R,6Z,7S,8R,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 331812-23-8 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(4-fluorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8R,8aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

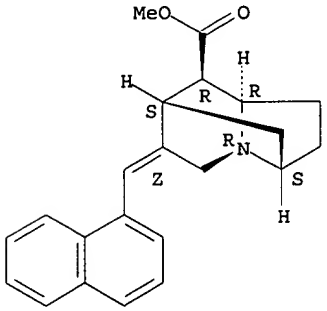


RN 331812-24-9 CAPLUS

09671104

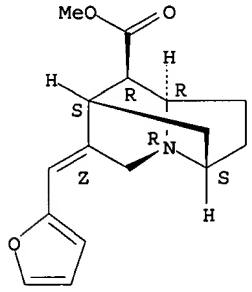
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(1-naphthalenylmethylene)-, methyl ester, (3S,4R,6Z,7S,8R,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



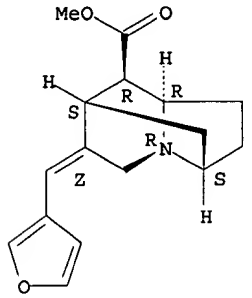
RN 331812-25-0 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-(2-furanylmethylene)octahydro-, methyl ester, (3S,4R,6Z,7S,8R,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 331812-26-1 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-(3-furanylmethylene)octahydro-, methyl ester, (3S,4R,6Z,7S,8R,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



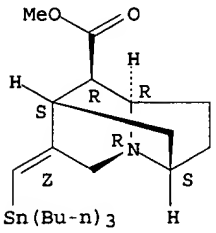
IT **331812-17-0P 331812-18-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and formulation of tropane analogs as inhibitors of reuptake of monoamines)

RN 331812-17-0 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(tributylstannyl)methylene]-, methyl ester, (3S,4R,6Z,7R,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

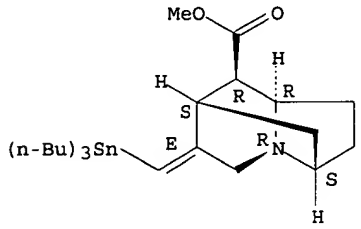
09671104

Double bond geometry as shown.

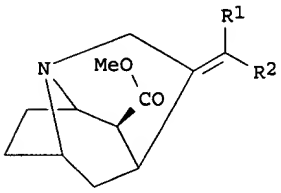


RN 331812-18-1 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(tributylstannyl)methylene]-, methyl ester, (3S,4R,6E,7S,8R,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L4 ANSWER 3 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 2000:698490 CAPLUS
DN 134:29588
TI Radical cyclization strategies for the formation of ring constrained tricyclic tropane analogues
AU Hoepping, A.; George, C.; Flippen-Anderson, J.; Kozikowski, A. P.
CS Department of Neurology, Drug Discovery Program, Georgetown University Medical Center, Washington, DC, 20007-2197, USA
SO Tetrahedron Letters (2000), 41(39), 7427-7432
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 134:29588
GI



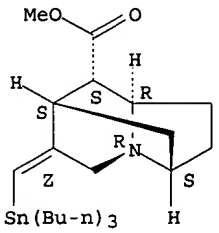
I

AB A concise and efficient method for the construction of N,C3-constrained tropane derivs., such as I (R1 = R2 = H; R1 = R2 = Ph; R1 = SnBu3, R2 = H), was developed. The key step of the reaction sequence involved either a 6- or a 7-trig radical cyclization.
IT **275355-50-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(radical cyclization strategies for the formation of ring constrained tricyclic tropane analogs)
RN 275355-50-5 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(tributylstannyl)methylene]-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

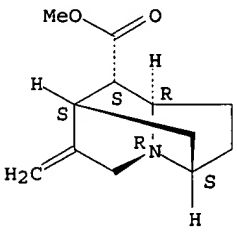
09671104

Double bond geometry as shown.



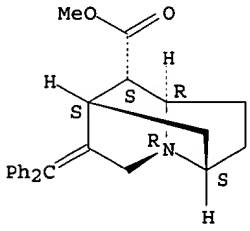
IT **310900-11-9P 310900-12-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(radical cyclization strategies for the formation of ring constrained tricyclic tropane analogs)
RN 310900-11-9 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-methylene-, methyl ester, (3S,4R,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



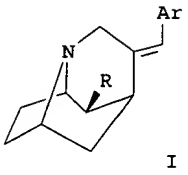
RN 310900-12-0 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-(diphenylmethylene)octahydro-, methyl ester, (3S,4R,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 2000:282099 CAPLUS
DN 133:43687
TI Novel Conformationally Constrained Tropane Analogues by 6-endo-trig Radical Cyclization and Stille Coupling - Switch of Activity toward the Serotonin and/or Norepinephrine Transporter
AU Hoepping, Alexander; Johnson, Kenneth M.; George, Clifford; Flippen-Anderson, Judith; Kozikowski, Alan P.
CS Drug Discovery Program, Georgetown University Medical Center, Washington, DC, 0007-2197, USA
SO Journal of Medicinal Chemistry (2000), 43(10), 2064-2071
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
OS CASREACT 133:43687
GI



I

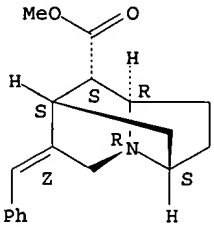
AB A novel class of tricyclic tropane analogs has been synthesized by making use of radical cyclization technol. in combination with the Stille coupling reaction. As hybrids between tropanes and quinuclidines, these tropaquinuclidines represent a significant structural departure from many of the other classes of tropane ligands synthesized to date. This structure class is characterized by the boat conformation of the tropane ring and the orientation of the addnl. bridge (and therefore of the nitrogen lone pair) together with the unusual placement of the arom. moiety. All compds. were tested for their ability to inhibit monoamine reuptake under identical conditions. The ability to inhibit reuptake of dopamine in comparison to cocaine is generally decreased in this series but for one compd. (1S,3R,6S)-(Z)-9-(2-thienylmethylene)-7-azatricyclo[4.3.1.03,7]decane-2.beta.-carboxylic acid Me ester (I; X = CO2Me, Ar = 2-thienyl) exhibits reasonable activity at the dopamine transporter (DAT) (Ki = 268 nM) and good activity at the norepinephrine transporter (NET) (Ki = 26 nM). The potency and selectivity shown by some of these ligands for the NET, serotonin transporter (SERT), or NET/SERT is striking, particularly in view of the displacement of the arom. ring in this series from its usual position at C-3 in the WIN analogs. Thus, (1S,3R,6S)-(Z)-9-(4-biphenylylmethylene)-7-azatricyclo[4.3.1.03,7]decane-2.beta.-carboxylic acid Me ester (I; R = CO2Me, Ar = 4-PhC6H4) is a selective inhibitor of norepinephrine reuptake (Ki = 12 nM). 4-Methoxy analog I (R = CO2Me, Ar = 4-MeOC6H4) is a mixed inhibitor of norepinephrine and serotonin reuptake (Ki = 187 nM at the NET and 56 nM at the SERT). The most active and selective compd. we found in the present series is [(1S,3R,6S)-2-(acetoxymethyl)-(Z)-9-(3,4-dichlorophenylmethylene)-7-azatricyclo[4.3.1.03,7]decane] (I; X = CH2OAc, Ar = 3,4-Cl2C6H3). This compd. is a potent (Ki = 1.6 nM) and selective inhibitor of serotonin reuptake into rat midbrain synaptosomes. Its selectivity is about 400-fold over the NET and about 1000-fold over the DAT. The results of this study further demonstrate the possibility of tuning the selectivity of tropane analogs toward the SERT or NET binding site. The ligands disclosed herein provide addnl. pharmacol. tools of use in attempting to correlate structure and transporter selectivity with in vivo studies of behavioral outcomes.

IT **275355-52-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of tropane analogs by 6-endo-trig radical cyclization and Stille coupling and switch of activity toward the serotonin and/or norepinephrine transporter)

RN 275355-52-7 CAPLUS

CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(phenylmethylene)-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



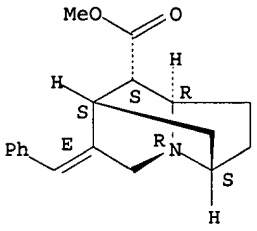
IT **275355-53-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of tropane analogs by 6-endo-trig radical cyclization and

Stille coupling and switch of activity toward the serotonin and/or norepinephrine transporter)

RN 275355-53-8 CAPLUS

CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(phenylmethylene)-, methyl ester, (3S,4R,6E,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

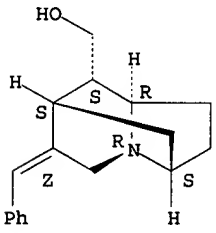


IT **275355-54-9P 275355-56-1P 275355-64-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of tropane analogs by 6-endo-trig radical cyclization and Stille coupling and switch of activity toward the serotonin and/or norepinephrine transporter)

RN 275355-54-9 CAPLUS

CN 3,7-Methanoindolizine-8-methanol, octahydro-6-(phenylmethylene)-, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

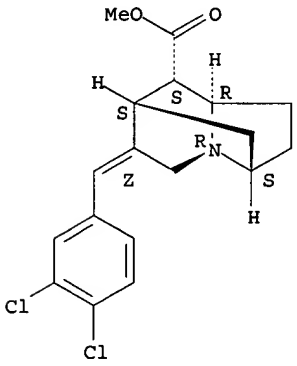
Absolute stereochemistry.
Double bond geometry as shown.



RN 275355-56-1 CAPLUS

CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(3,4-dichlorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



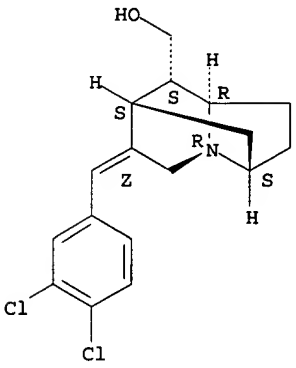
RN 275355-64-1 CAPLUS

CN 3,7-Methanoindolizine-8-methanol, 6-[(3,4-dichlorophenyl)methylene]octahydro-, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

09671104

Double bond geometry as shown.

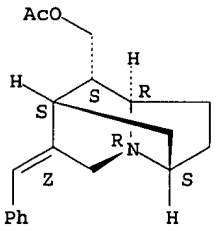


IT **275355-55-0P 275355-57-2P 275355-58-3P**
275355-59-4P 275355-60-7P 275355-61-8P
275355-62-9P 275355-63-0P 275355-65-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of tropane analogs by 6-endo-trig radical cyclization and Stille coupling and switch of activity toward the serotonin and/or norepinephrine transporter)

RN 275355-55-0 CAPLUS

CN 3,7-Methanoindolizine-8-methanol, octahydro-6-(phenylmethylene)-, acetate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

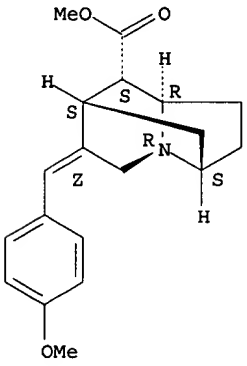
Absolute stereochemistry.
Double bond geometry as shown.



RN 275355-57-2 CAPLUS

CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(4-methoxyphenyl)methylene]-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

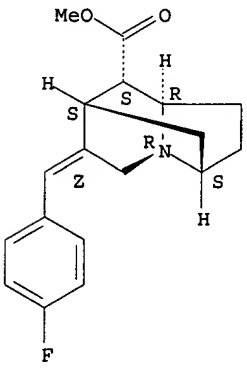
Absolute stereochemistry.
Double bond geometry as shown.



RN 275355-58-3 CAPLUS

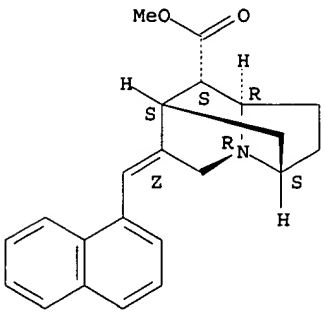
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-[(4-fluorophenyl)methylene]octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



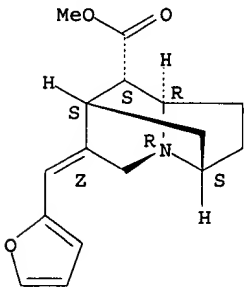
RN 275355-59-4 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(1-naphthalenylmethylene)-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



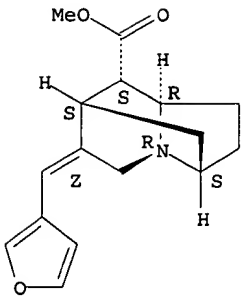
RN 275355-60-7 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-(2-furanylmethylene)octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



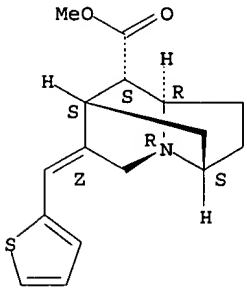
RN 275355-61-8 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-(3-furanylmethylene)octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



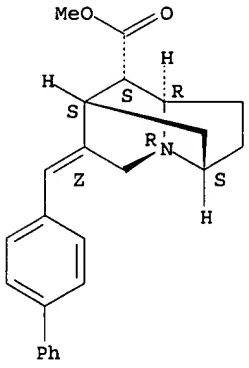
RN 275355-62-9 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-(2-thienylmethylene)-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 275355-63-0 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, 6-([1,1'-biphenyl]-4-ylmethylene)octahydro-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 275355-65-2 CAPLUS
CN 3,7-Methanoindolizine-8-methanol, 6-[(3,4-dichlorophenyl)methylene]octahydro-, acetate (ester), (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

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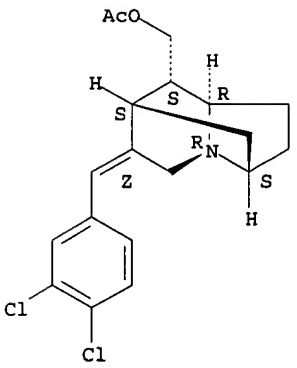
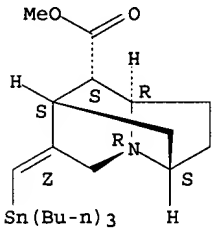


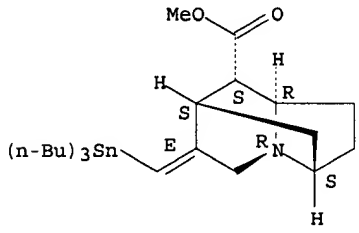
IT **275355-50-5P 275355-51-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of tropane analogs by 6-endo-trig radical cyclization and Stille coupling and switch of activity toward the serotonin and/or norepinephrine transporter)
RN 275355-50-5 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(tributylstannyl)methylene]-, methyl ester, (3S,4R,6Z,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 275355-51-6 CAPLUS
CN 3,7-Methanoindolizine-8-carboxylic acid, octahydro-6-[(tributylstannyl)methylene]-, methyl ester, (3S,4R,6E,7S,8S,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



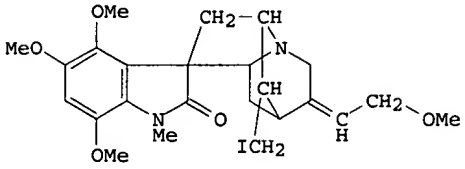
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1992:497324 CAPLUS
DN 117:97324
TI Indole derivatives as ulcer inhibitors
IN Sakai, Shinichiro; Sugita, Masanori; Katsuyama, Koichi; Honjo, Emiko
PA Nisshin Flour Milling Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

09671104

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03284622	A2	19911216	JP 1990-81050	19900330

GI



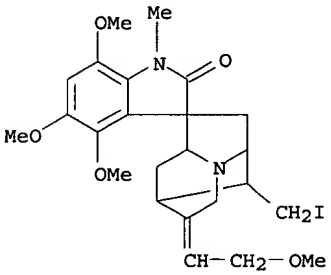
I

AB Ulcer inhibiting formulations contain I or its derivs. A tablet was prepd. contg. I 10, lactose 67, cryst. cellulose 15, corn starch 7, and Mg stearate 1 mg. Structures of 6 I derivs. are shown. Inhibitory activities of these compds. on H+/K+ ATPase were demonstrated.

IT **32975-52-3**
RL: BIOL (Biological study)
(as ulcer inhibitor)

RN 32975-52-3 CAPLUS

CN Gardneramine oxindole, 17-deoxy-17-iodo- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2002 ACS

AN 1992:201108 CAPLUS

DN 116:201108

TI Antitumor formulations containing indole derivatives

IN Sakai, Shinichiro; Sugita, Masanori; Katsuyama, Koichi; Honjo, Emiko

PA Nisshin Flour Milling Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

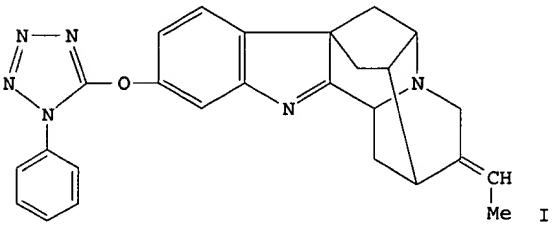
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03284623	A2	19911216	JP 1990-81051	19900330
	JP 2833821	B2	19981209		

GI

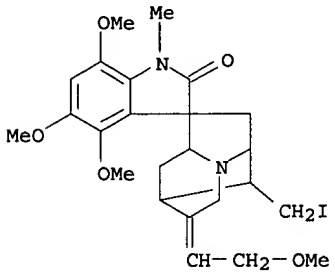


I

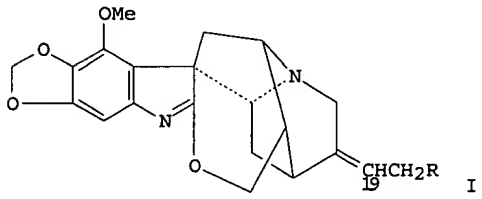
AB An antitumor formulation contains an indole deriv. such as I, and pharmaceutically acceptable acid and/or salt thereof. Thus, an injection soln. was prepd. mixing I 5, peanut oil q.s., benzyl alc. 1g, making the total vol. 100 mL by adding peanut oil. The soln. was placed in vials (1 mL each) and sealed.

09671104

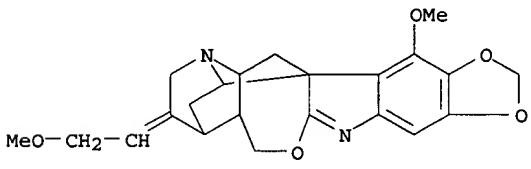
IT **32975-52-3**
RL: BIOL (Biological study)
(antitumor formulation contg.)
RN 32975-52-3 CAPLUS
CN Gardneramine oxindole, 17-deoxy-17-iodo- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1987:637086 CAPLUS
DN 107:237086
TI Gardneria alkaloids. Part 14. The structure of gardfloramine and 18-demethoxygardfloramine
AU Sakai, Shinichiro; Aimi, Norio; Yamaguchi, Keiichi; Ogata, Koreharu; Haginiwa, Joju
CS Fac. Pharm. Sci., Chiba Univ., Chiba, 260, Japan
SO Chem. Pharm. Bull. (1987), 35(1), 453-5
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
GI



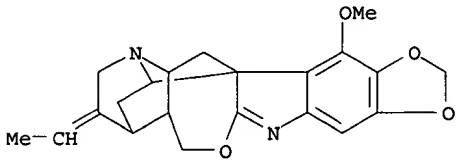
AB The structure of gardfloramine (I, R = MeO, .DELTA.19 Z isomer), which has been isolated as one of the minor bases from Gardneria multiflora, was detd. by x-ray anal. Its oxygenation pattern on the arom. ring was revealed to be 9-methoxy-10,11-methylenedioxy and is different from that of gardneramine. The structure of another minor alkaloid, 18-demethoxygardfloramine (I, R = H, .DELTA.19 E isomer) was also detd. by comparing its 13C-NMR spectra with gardfloramine.
IT **56198-74-4**, Gardfloramine
RL: RCT (Reactant)
(crystal and mol. structures of)
RN 56198-74-4 CAPLUS
CN 8,11,12a-Ethanylylidene-7H-1,3-dioxolo[4,5-f]pyrido[2',3':5,6]oxepino[2,3-b]indole, 7a,8,9,10,11a,12-hexahydro-13-methoxy-9-(2-methoxyethylidene)-, (7aS,8R,9Z,11R,11aS,12aR,14S)- (9CI) (CA INDEX NAME)



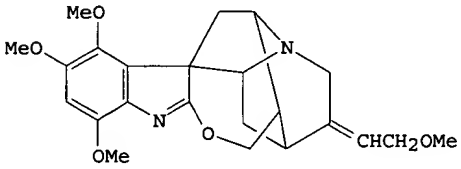
IT **56198-75-5**
RL: PRP (Properties)
(structure of)
RN 56198-75-5 CAPLUS

09671104

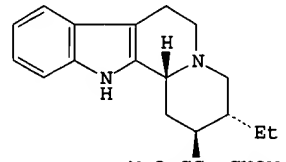
CN Gardneramine oxindole, 1,2-didehydro-10,12,18-tridemethoxy-2-deoxo-17-deoxy-2,17-epoxy-10,11-[methylenebis(oxy)]-, (19E)- (9CI) (CA INDEX NAME)



L4 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1983:209919 CAPLUS
DN 98:209919
TI Site of the ganglion blocking action of gardneramine and hirsutine in the dog urinary bladder in situ preparation
AU Ozaki, Yukihiro; Harada, Masatoshi
CS Fac. Pharm. Sci., Chiba Univ., Chiba, 260, Japan
SO Jpn. J. Pharmacol. (1983), 33(2), 463-71
CODEN: JJPAAZ; ISSN: 0021-5198
DT Journal
LA English
GI



I



II

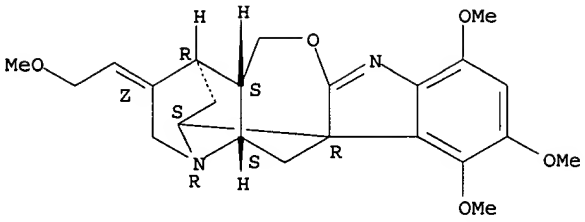
AB The ganglion blocking site of gardneramine (GA)(I) [**34274-91-4**] and hirsutine (HS)(II) [7729-23-9] was studied in the dog urinary bladder in an in situ prepn. GA and HS selectively inhibited the dimethylphenylpiperazinium (DMPP)-induced contraction without having an antagonistic effect on the McN-A 343-induced and acetylcholine-induced contraction. In addn., since GA and HS showed a local anesthetic action weaker than that of procaine, the effect of procaine [59-46-1] was studied on the same prepn. Procaine inhibited the McN-A-343-induced contraction, and it slightly inhibited the DMPP-induced and acetylcholine-induced contraction. Thus, GA and HS inhibits the ganglionic transmission of the dog urinary bladder and blockade of the nicotinic receptor plays a main role.

IT **34274-91-4**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(ganglion blocking activity of, in urinary bladder, nicotinic receptor in relation to)

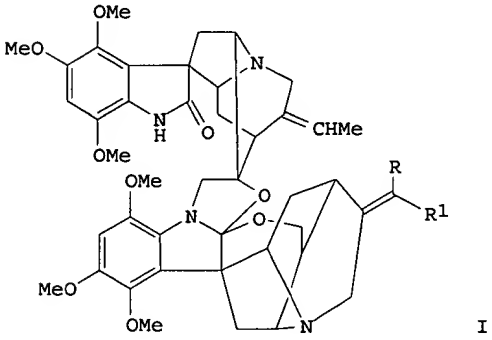
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

09671104



L4 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1982:545099 CAPLUS
DN 97:145099
TI Gardneria alkaloids. Part 13. Structure of gardmultine and demethoxygardmultine; bis-type indole alkaloids of Gardneria multiflora Makino
AU Sakai, Shinichiro; Aimi, Norio; Yamaguchi, Keiichi; Yamanaka, Etsuji; Haginiwa, Joju
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO J. Chem. Soc., Perkin Trans. 1 (1982), (6), 1257-62
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English
GI



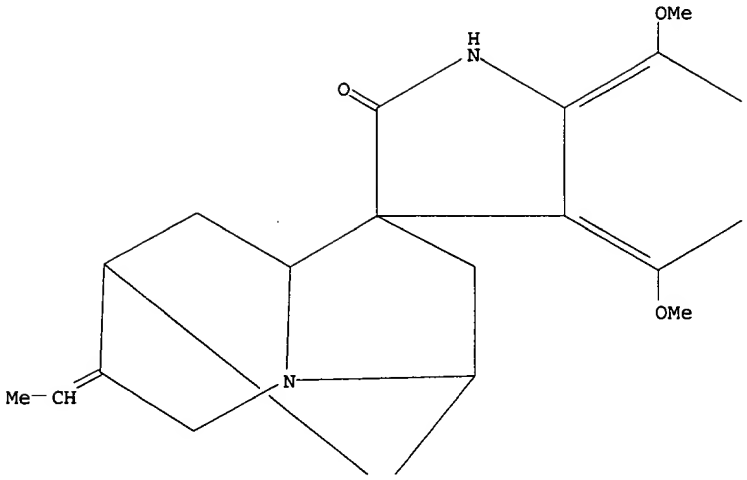
I

AB Demethoxygardmultine (I; R = Me, R1 = H) was isolated as an impurity from gardmultine (I; R = H, R1 = CH2OMe) (II) and its structure detd. by chem. and spectral methods. As the data previously reported for II (1975) were of the impure product, the phys. data of II and some derivs. were reexamd. and its structure confirmed.

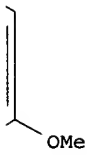
IT **83062-55-9P**
RL: PREP (Preparation)
(from Gardneria multiflora, mol. structure of)

RN 83062-55-9 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 18,18'-didemethoxy-2-deoxo-17,17'-dideoxy-2,16':2,17-diepoxy-, (2.beta.,19'E)- (9CI) (CA INDEX NAME)

PAGE 1-B

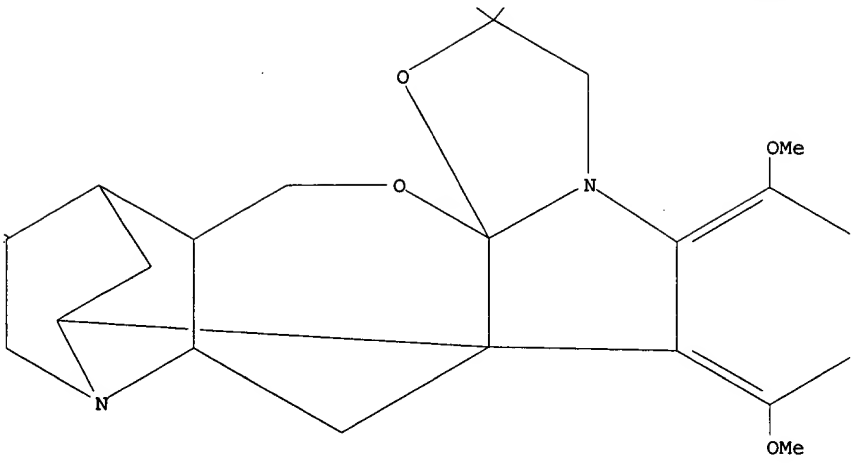


PAGE 1-C

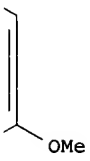


PAGE 2-A

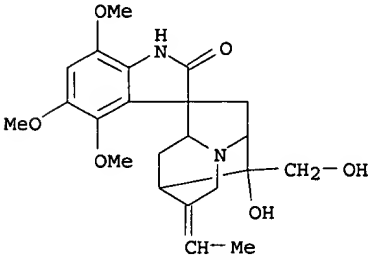
PAGE 2-B



PAGE 2-C



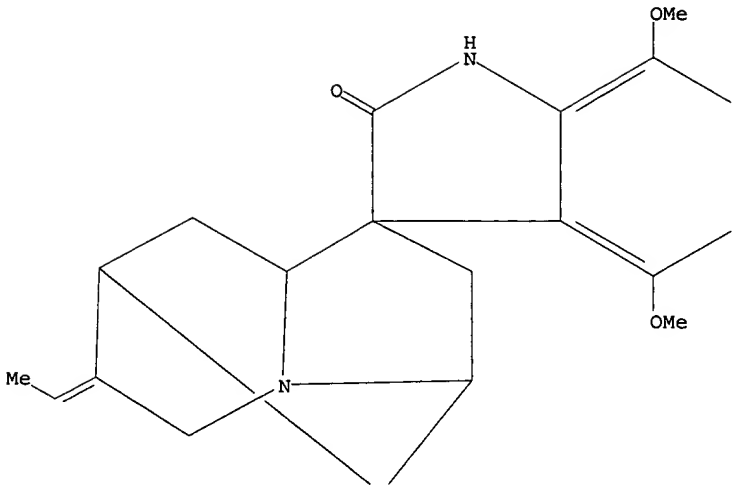
IT **56210-06-1**
RL: RCT (Reactant)
(oxidative cleavage of)
RN 56210-06-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 6'-ethylidene-2',3',6',7',8',8'a-hexahydro-9'-hydroxy-9'-(hydroxymethyl)-4,5,7-trimethoxy-, (1'S,3'S,6'E,7'S,8'aS,9'R)- (9CI) (CA INDEX NAME)



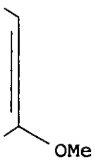
IT **56197-32-1**
RL: PRP (Properties)
(phys. properties of, reexamn. of)
RN 56197-32-1 CAPLUS
CN Dispiro[13,8b,10-ethanylylidene-11H-pyrido[2',3':5,6]oxepino[2,3-b]oxazolo[3,2-a]indole-2(3H),9'-[3,7]methanoindolizine-1'(5'H),3''-[3H]indol]-2''(1''H)-one, 6'-ethylidene-2',3',6',7',8',8'a,9,9a,12,13,13a,14-dodecahydro-4'',5,6'',7,7'',8-hexamethoxy-12-(2-methoxyethylidene)-, stereoisomer (9CI) (CA INDEX NAME)

Currently available stereo shown.

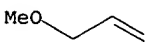
PAGE 1-B



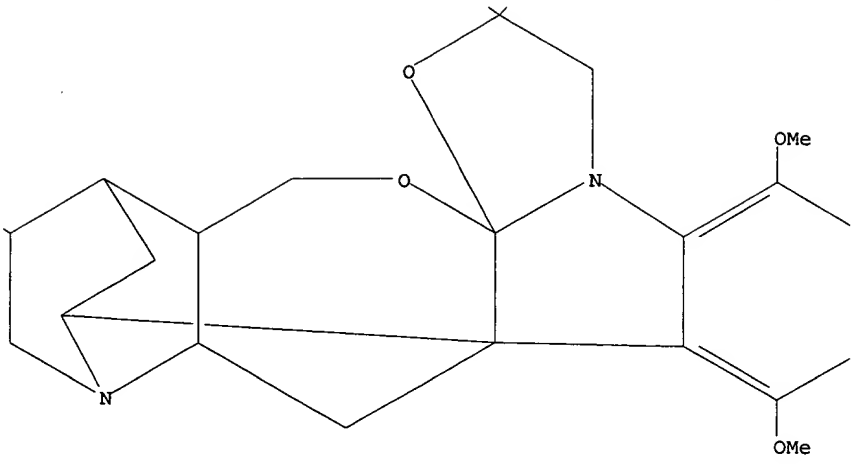
PAGE 1-C



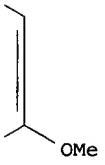
PAGE 2-A



PAGE 2-B

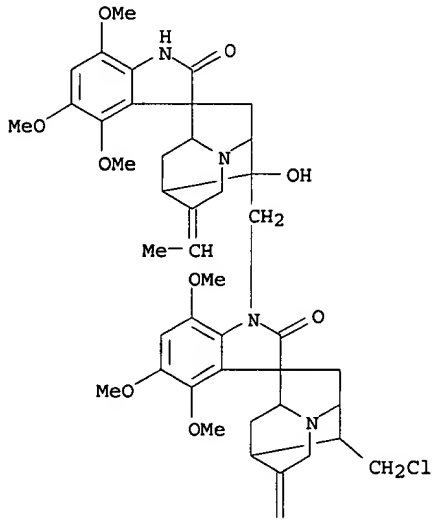


PAGE 2-C

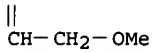


IT **56197-35-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of)
RN 56197-35-4 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 17-chloro-18'-demethoxy-17,17'-dideoxy-16'-hydroxy-, (19'E)- (9CI) (CA INDEX NAME)

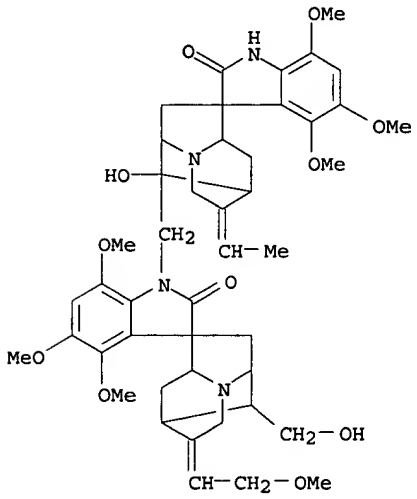
PAGE 1-A



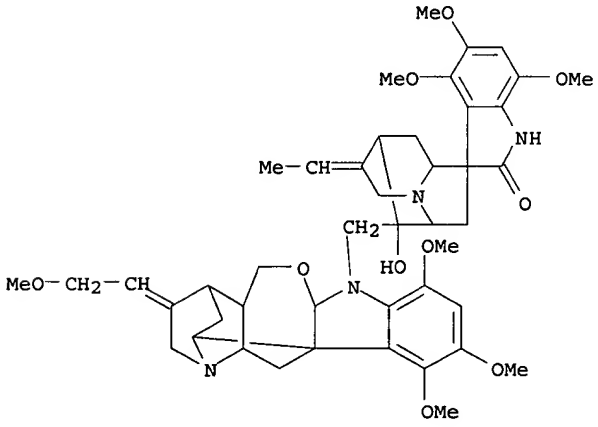
PAGE 2-A



IT **56197-36-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and methylsulfonylation of)
RN 56197-36-5 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 18'-demethoxy-17'-deoxy-16'-hydroxy-, (19'E)- (9CI) (CA INDEX NAME)



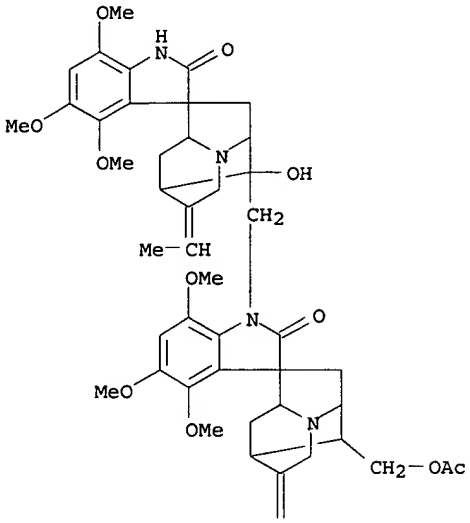
IT **83062-57-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and oxidn. of)
RN 83062-57-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 6'-ethylidene-9'-[[(1R,3Z,4R,4aS,11bR,12aS,13S)-3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-4,1,11b-ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indol-7(6aH)-yl]methyl]-2',3',6',7',8',8'a-hexahydro-9'-hydroxy-4,5,7-trimethoxy-, (1'S,3'S,7'S,8'aS,9'S)- (9CI) (CA INDEX NAME)



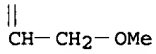
IT **56197-33-2P 56197-34-3P 83048-31-1P**
83048-32-2P 83048-33-3P 83060-41-7P
83062-53-7P 83062-54-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 56197-33-2 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 18'-demethoxy-17'-deoxy-16'-hydroxy-, 17-acetate, (19'E)- (9CI) (CA INDEX NAME)

PAGE 1-A

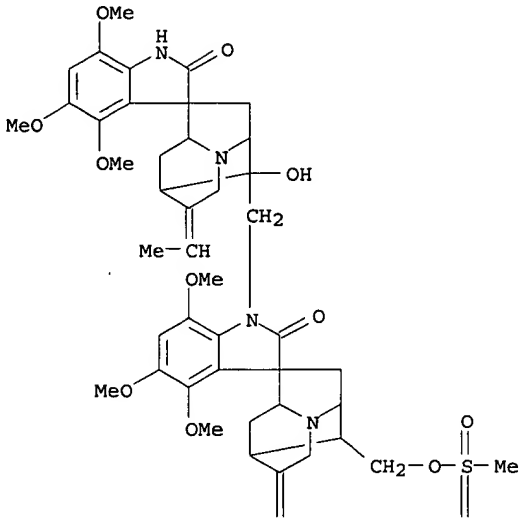


PAGE 2-A

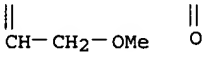


RN 56197-34-3 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 18'-demethoxy-17'-deoxy-16'-hydroxy-, 17-methanesulfonate, (19'E)- (9CI) (CA INDEX NAME)

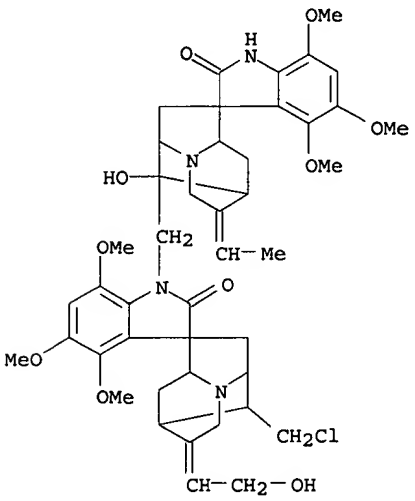
PAGE 1-A



PAGE 2-A

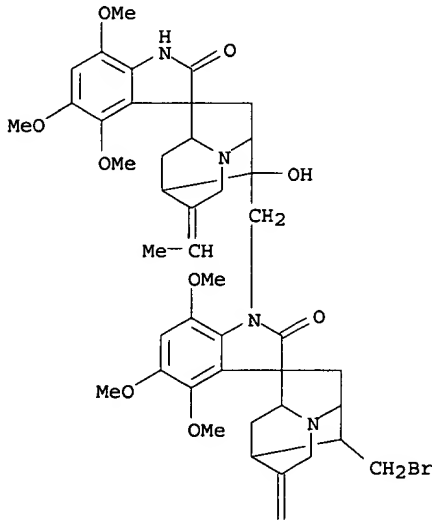


RN 83048-31-1 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 17-chloro-18'-demethoxy-O18-demethyl-17,17'-dideoxy-16'-hydroxy-, (19'E)- (9CI) (CA INDEX NAME)

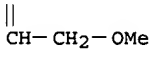


RN 83048-32-2 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 17-bromo-18'-demethoxy-17,17'-dideoxy-16'-hydroxy-, (19'E)- (9CI) (CA INDEX NAME)

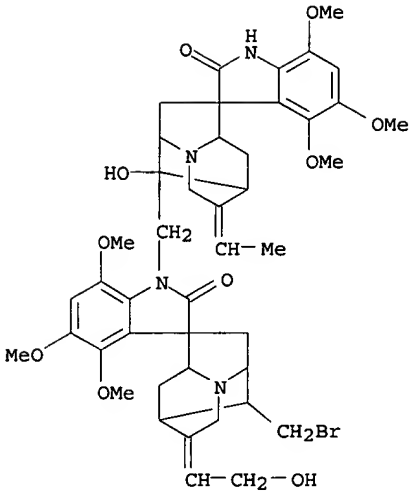
PAGE 1-A



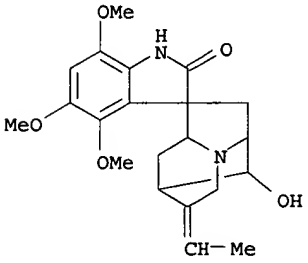
PAGE 2-A



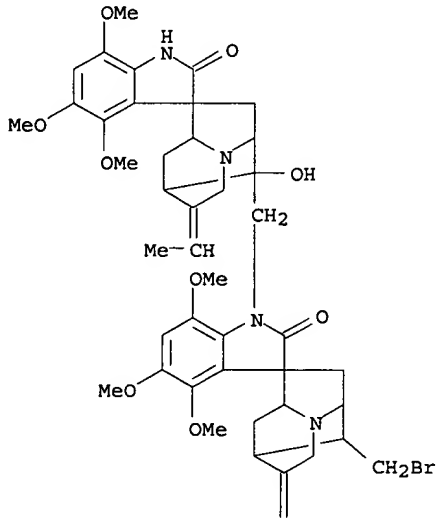
RN 83048-33-3 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 17-bromo-18'-demethoxy-O18-demethyl-17,17'-dideoxy-16'-hydroxy-, (19'E)- (9CI) (CA INDEX NAME)



RN 83060-41-7 CAPLUS
CN Gardneramine oxindole, 16-de(hydroxymethyl)-16-hydroxy-18-demethoxy-, (19E)- (9CI) (CA INDEX NAME)



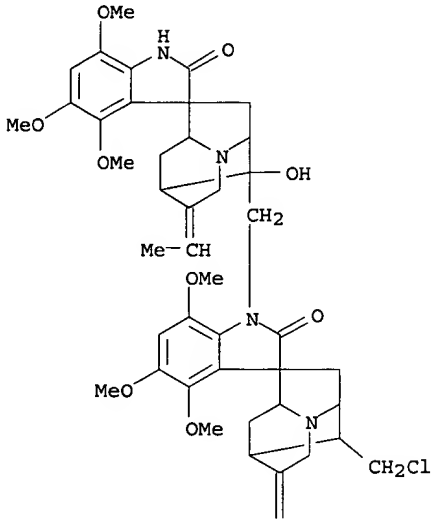
RN 83062-53-7 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 17-bromo-18,18'-didemethoxy-17,17'-dideoxy-16'-hydroxy-, (19'E)- (9CI) (CA INDEX NAME)



PAGE 2-A

RN 83062-54-8 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 17-chloro-18,18'-didemethoxy-17,17'-dideoxy-16'-hydroxy-, (19'E)- (9CI) (CA INDEX NAME)

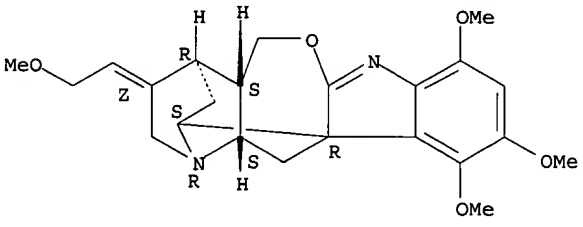
PAGE 1-A



PAGE 2-A

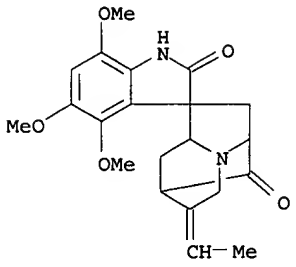
IT **34274-91-4P 83060-40-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, from gardmultine)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



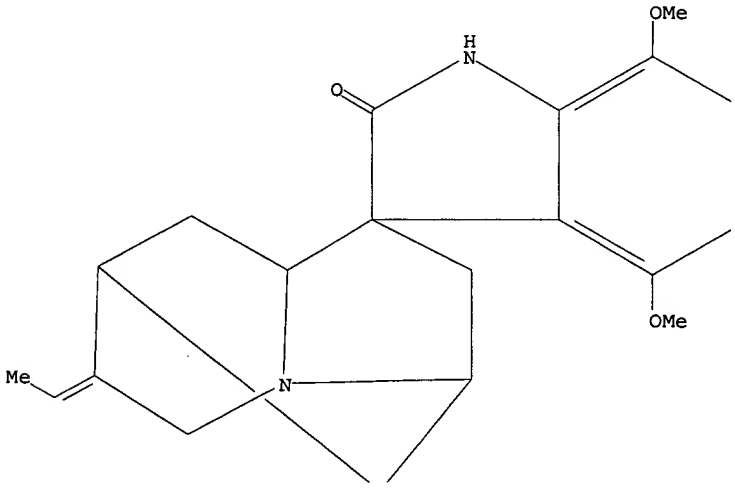
RN 83060-40-6 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizine]-2(1H),9'-dione, 6'-ethylidene-2',3',6',7',8',8'a-hexahydro-4,5,7-trimethoxy-, [1'R-(1'.alpha.,3'.beta.,6'E,7'.beta.,8'a.alpha.)]- (9CI) (CA INDEX NAME)

09671104

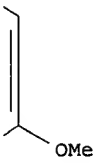


L4 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1982:510248 CAPLUS
DN 97:110248
TI X-ray structure determination of gardmultine. A bis-indole alkaloid isolated from Gardneria multiflora Makino
AU Silverton, James V.; Akiyama, Toshiyuki
CS Lab. Chem., Natl. Heart Lung Blood Inst., Bethesda, MD, 20205, USA
SO J. Chem. Soc., Perkin Trans. 1 (1982), (6), 1263-7
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English
AB The mol. structure of gardmultine was confirmed by x-ray crystallog. anal.
IT **56197-32-1**
RL: PRP (Properties)
(crystal and mol. structure of)
RN 56197-32-1 CAPLUS
CN Dispiro[13,8b,10-ethanylylidene-11H-pyrido[2',3':5,6]oxepino[2,3-b]oxazolo[3,2-a]indole-2(3H),9'-[3,7]methanoindolizine-1'(5'H),3''-[3H]indol]-2''(1''H)-one, 6'-ethylidene-2',3',6',7',8',8'a,9,9a,12,13,13a,14-dodecahydro-4'',5,6'',7,7'',8-hexamethoxy-12-(2-methoxyethylidene)-, stereoisomer (9CI) (CA INDEX NAME)

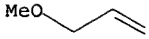
Currently available stereo shown.



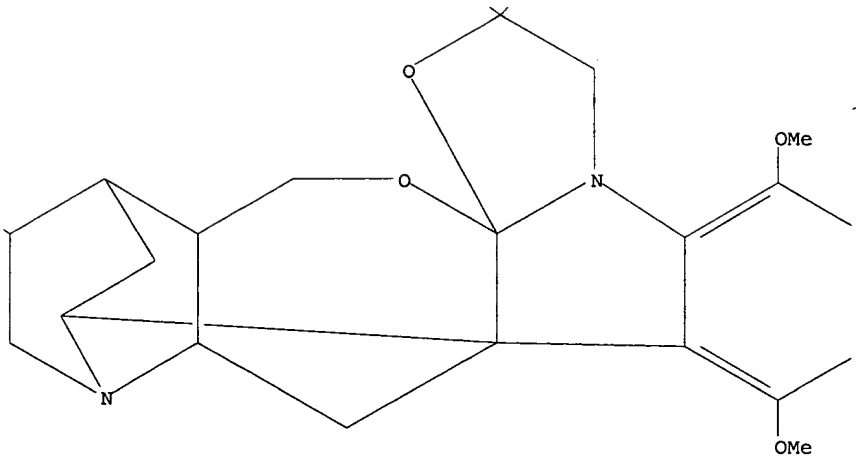
PAGE 1-C



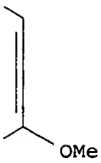
PAGE 2-A



PAGE 2-B



PAGE 2-C



09671104

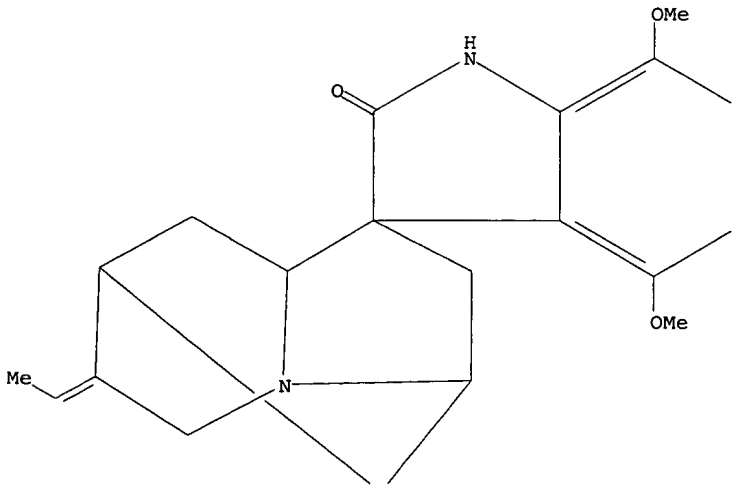
IT **83048-34-4**
RL: PRP (Properties)
(crystal structure of)
RN 83048-34-4 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 18'-demethoxy-2-deoxo-17,17'-dideoxy-2,16':2,17-diepoxy-, (2.beta.,19'E)-, compd. with methanol (1:1) (9CI) (CA INDEX NAME)

CM 1

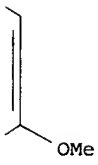
CRN 56197-32-1
CMF C45 H54 N4 O10
CDES *

Currently available stereo shown.

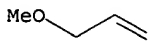
PAGE 1-B



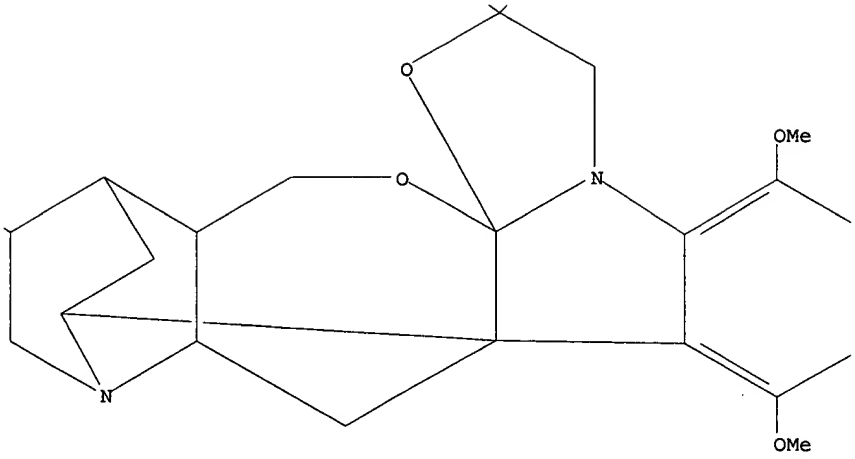
PAGE 1-C



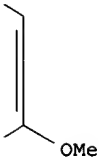
PAGE 2-A



PAGE 2-B



PAGE 2-C



CM 2

CRN 67-56-1
CMF C H4 O

H_3C-OH

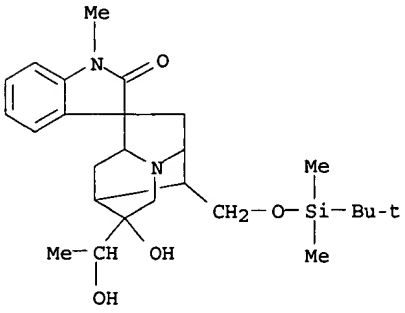
L4 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1980:639745 CAPLUS
DN 93:239745
TI Biomimetic synthesis of macroline
AU Esmond, Robert W.; Le Quesne, Philip W.
CS Dep. Chem., Northeastern Univ., Boston, MA, 02115, USA
SO J. Am. Chem. Soc. (1980), 102(23), 7116-17
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Macroline I was prepd. by base treatment of the .beta.-oxoammonium salt II, which in turn was prepd. from normacusine B (III). The steps in the sequence are regarded as biomimetic, and give support to a pathway proposed earlier for the biosynthesis of macroline, which is the synthetic precursor of a variety of monomeric and dimeric indole alkaloids.

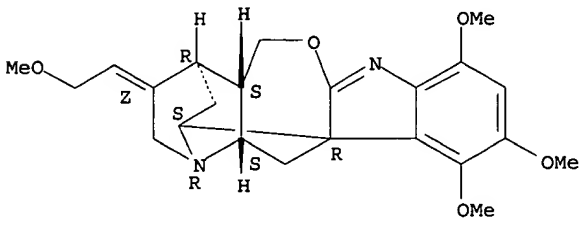
09671104

IT **75750-91-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., tosylation, and cyclization of, epoxide from)
RN 75750-91-3 CAPLUS
CN Voachalotine oxindole, 16-de(methoxycarbonyl)-O17-[(1,1-dimethylethyl)dimethylsilyl]-19,20-dihydro-19,20-dihydroxy-, (7.xi.,16R,19R,20.alpha.)- (9CI) (CA INDEX NAME)



L4 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1980:47246 CAPLUS
DN 92:47246
TI Solvent system optimization in the separation of indole alkaloids by silica gel liquid chromatography
AU Hara, Shoji; Yamauchi, Noriko; Nakae, Chizuko; Sakai, Shinichiro
CS Tokyo Coll. Pharm., Tokyo, 192-03, Japan
SO Anal. Chem. (1980), 52(1), 33-8
CODEN: ANCHAM; ISSN: 0003-2700
DT Journal
LA English
AB To systematize an optimization procedure for sepns. involving multifunctional solutes in silica gel liq.-solid chromatog., the retention behaviors of 13 indole alkaloids were examd. by using 4 binary solvent systems.. Quant. correlation between capacity ratio of the solute and the solvent compn. was detd. on the basis of a mechanistic concept of the adsorption-desorption equil. on the silica gel surface. Retention characteristics related to mol. structure are discussed for an understanding of the adsorption sequence of the alkaloids and for proposing adsorption sites in the solutes. By means of the retention data obtained, a procedure for the systematic design of the mobile phase was developed. An example of the optimization process for the microanal. of indole alkaloids in plants was demonstrated.
IT **34274-91-4**
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, on silica gel, solvent system optimization for)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

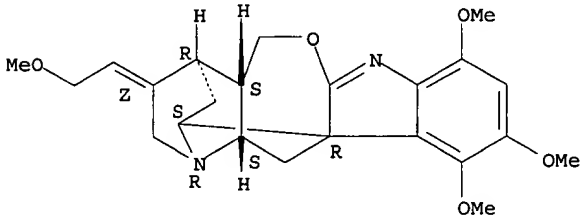
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



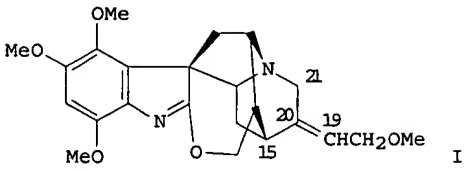
L4 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1979:449608 CAPLUS
DN 91:49608
TI Effects of indole alkaloids from Gardneria nutans Sieb. and Zucc. and Uncaria rhynchophylla Miq. on a guinea pig urinary bladder preparation in

situ
AU Harada, Masatoshi; Ozaki, Yukihiro; Ohno, Hiroshi
CS Fac. Pharm. Sci., Univ. Chiba, Chiba, 260, Japan
SO Chem. Pharm. Bull. (1979), 27(5), 1069-74
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
AB The effects of 6 indole alkaloids on parasympathetic ganglionic transmission were studied in a prepn. of the guinea pig urinary bladder in situ. The effect of hirsutine [7729-23-9] on spontaneous movement of the organ was also examd. Among these alkaloids, gardneramine [**34274-91-4**] and hirsutine most potently inhibited the contraction of the urinary bladder induced by elec. stimulation of the pelvic nerves. Their potency was .apprx.50% of that of hexamethonium. The effect of gardneramine was of short duration. Both alkaloids depressed the contraction induced by intraarterial dimethylphenylpiperazinium, with no antagonizing action to the acetylcholine-induced contraction. Hirsutine showed a local anesthetic action in the isolated frog sciatic nerve prepn., whereas other alkaloids had only a weak effect. Hirsutine, isorhynchophylline [6859-01-4], and gardnerine [23172-92-1] elevated the tone of the spontaneous movement of the organ and augmented its amplitude. The stimulating action of hirsutine was not affected by pretreatment with tetrodotoxin, atropine, diphenhydramine, or hexamethonium. Apparently, hirsutine and gardneramine inhibit bladder contraction by inhibition of parasympathetic ganglionic transmission.
IT **34274-91-4**
RL: BIOL (Biological study)
(bladder contraction inhibition by, parasympathetic ganglion in relation to)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

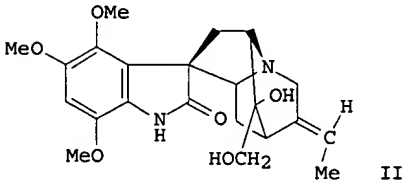
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



L4 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1979:152433 CAPLUS
DN 90:152433
TI Gardneria alkaloids. XII. Carbon magnetic resonance spectra of gardneria alkaloids. A study on the configuration of the side chain double bonds of indole alkaloids
AU Aimi, Norio; Yamaguchi, Keiichi; Sakai, Shinichiro; Haginiwa, Joju; Kubo, Akinori
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO Chem. Pharm. Bull. (1978), 26(11), 3444-9
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
GI



I



II

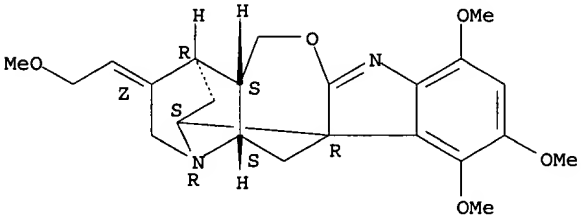
AB 13C-NMR spectra of Gardneria alkaloids, e.g. gardneramine (I), were detd. The chem. shifts of C-15 and C-21 were diagnostic for the configuration of the C-19 side chain double bonds. The E configuration of the ethylidene side chain of chitosenine (II) was confirmed.

IT **34274-91-4 52061-59-3 56246-54-9**
69761-85-9 69779-52-8
RL: PRP (Properties)
(carbon-13 NMR of)

RN 34274-91-4 CAPLUS

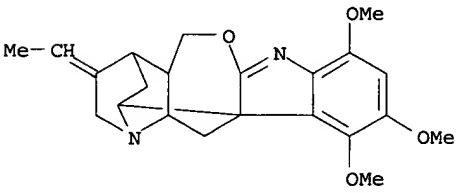
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



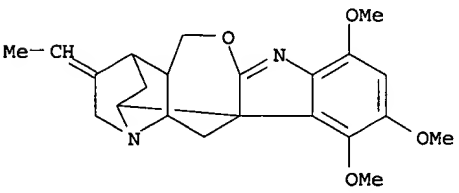
RN 52061-59-3 CAPLUS

CN Gardneramine oxindole, 1,2-didehydro-18-demethoxy-2-deoxo-17-deoxy-2,17-epoxy- (9CI) (CA INDEX NAME)



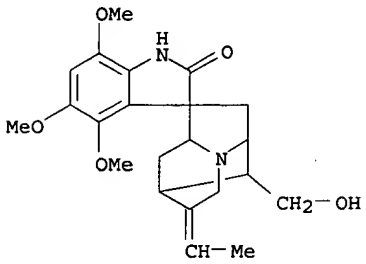
RN 56246-54-9 CAPLUS

CN Gardneramine oxindole, 1,2-didehydro-18-demethoxy-2-deoxo-17-deoxy-2,17-epoxy-, (19E)- (9CI) (CA INDEX NAME)

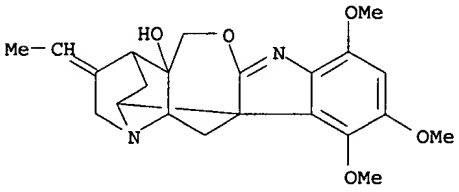


09671104

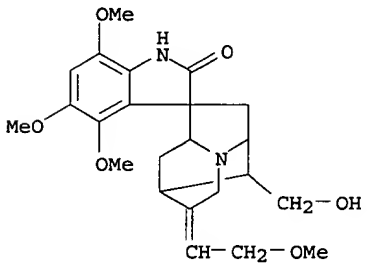
RN 69761-85-9 CAPLUS
CN Gardneramine oxindole, 18-demethoxy-, (19E)- (9CI) (CA INDEX NAME)



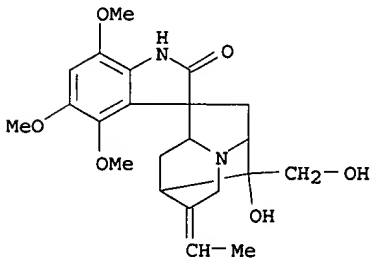
RN 69779-52-8 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-18-demethoxy-2-deoxo-17-deoxy-2,17-epoxy-16-hydroxy-, (19E)- (9CI) (CA INDEX NAME)



IT **32975-50-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 32975-50-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 2',3',6',7',8',8'a-hexahydro-9'-(hydroxymethyl)-4,5,7-trimethoxy-6'-(2-methoxyethylidene)-, (1'R,3'S,6'Z,7'R,8'aS,9'S)- (9CI) (CA INDEX NAME)

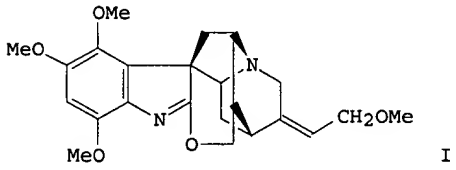


IT **56210-06-1**
RL: PRP (Properties)
(side chain configuration of, carbon NMR in relation to)
RN 56210-06-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 6'-ethylidene-2',3',6',7',8',8'a-hexahydro-9'-hydroxy-9'-(hydroxymethyl)-4,5,7-trimethoxy-, (1'S,3'S,6'E,7'S,8'aS,9'R)- (9CI) (CA INDEX NAME)



09671104

L4 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1978:182751 CAPLUS
DN 88:182751
TI Effect of Gardneria alkaloids on ganglionic transmission in the rabbit and rat superior cervical ganglia in situ
AU Harada, Masatoshi; Ozaki, Yukihiro
CS Fac. Pharm. Sci., Univ. Chiba, Chiba, Japan
SO Chem. Pharm. Bull. (1978), 26(1), 48-52
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
GI

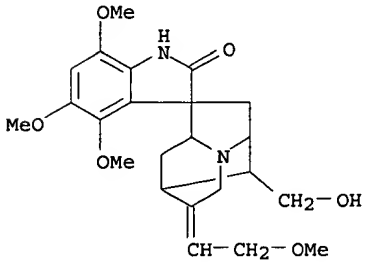


I

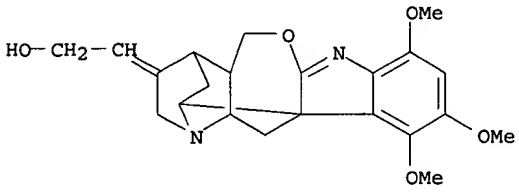
AB Six Gardneria alkaloids were tested for ganglionic blocking effects in the rabbit and rat superior cervical ganglionic in situ prepns. Gardneramine (I) [**34274-91-4**], gardnerine [23172-92-1], gardnutine [23172-98-7], and hydroxygardnutine [23173-00-4] had equiv. max. activity in both ganglionic prepns. The most potent compds. were I, gardnerine, and Alkaloid I [**32975-50-1**]. The activities of I and gardnerine were 1/2 and 1/4, resp., that of hexamethonium. The effects of the alkaloids were short-acting compared to that of hexamethonium. The activities of hydroxygardnutine and 18-demethylgardneramine [**32975-55-6**] were very weak.

IT **32975-50-1 32975-55-6 34274-91-4**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(ganglionic blocking activity of)

RN 32975-50-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 2',3',6',7',8',8'a-hexahydro-9'-(hydroxymethyl)-4,5,7-trimethoxy-6'-(2-methoxyethylidene)-, (1'R,3'S,6'Z,7'R,8'aS,9'S)- (9CI) (CA INDEX NAME)



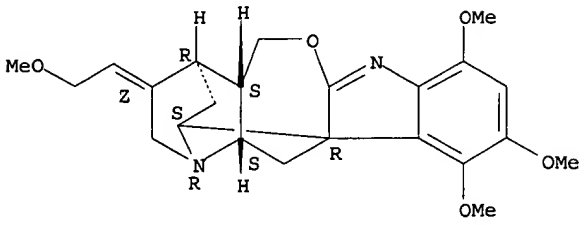
RN 32975-55-6 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-O18-demethyl-2-deoxo-17-deoxy-2,17-epoxy- (9CI) (CA INDEX NAME)



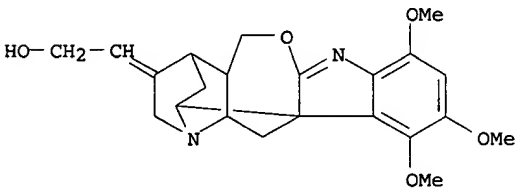
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

09671104

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

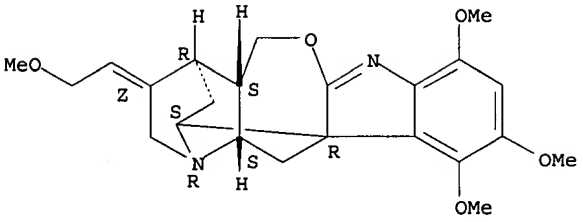


L4 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1978:23222 CAPLUS
DN 88:23222
TI Gardneria alkaloids. XI. Several minor bases of Gardneria multiflora Makino
AU Sakai, Shinichiro; Aimi, Norio; Yamaguchi, Keiichi; Hori, Kosumi; Haginiwa, Joju
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO Yakugaku Zasshi (1977), 97(4), 399-409
CODEN: YKKZAJ
DT Journal
LA Japanese
GI For diagram(s), see printed CA Issue.
AB Several new alkaloids were isolated from Gardneria multiflora Makino (Loganiaceae) and mol. structures were detd. for six of them. Alkaloids J (I) and L (II) are trimethoxyoxindole alkaloids having a gardneramine skeleton. The characteristic feature of these two alkaloids is their C-16-R configuration, which was proved by formation of an ether ring compd. (III) on heating of I or II in dil. HCl. I and II were derived from known bases, gardneramine and 18-demethylgardneramine, resp. Alkaloid N (IV) is also a trimethoxy oxindole alkaloid which has an .alpha.-glycol function at C-16 and C-17. This functionality was proved by the formation of an acetonide. The configurations of C-7 and C-16 in IV were detd. by the generation of an iminoether compd. (V). Gardneramine N-oxide, alkaloid M (VI), and exomethylene compd. (VII) were also isolated. Alkaloid I also exists as a natural alkaloid. Alkaloidal constitution of Gardneria liukiuensis was also studied and was proved to be quite similar to that of Gardneria multiflora.
IT **32975-55-6 34274-91-4**
RL: RCT (Reactant)
(acetylation and ring cleavage of)
RN 32975-55-6 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-O18-demethyl-2-deoxo-17-deoxy-2,17-epoxy- (9CI) (CA INDEX NAME)

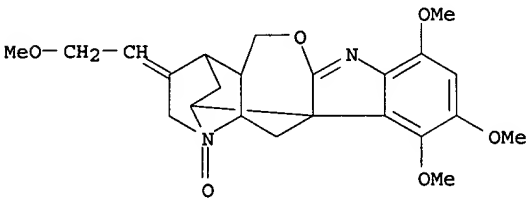


RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

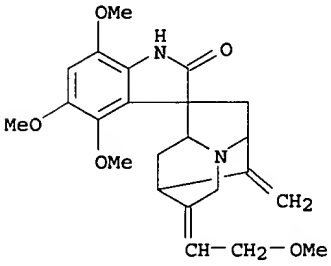
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



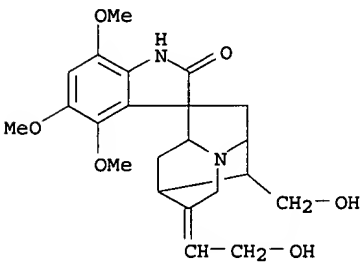
IT **64494-86-6**
RL: RCT (Reactant)
(alkaloid of Gardneria multiflora, structure of)
RN 64494-86-6 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-2-deoxo-17-deoxy-2,17-epoxy-, 4-oxide (9CI) (CA INDEX NAME)



IT **64494-85-5P**
RL: PREP (Preparation)
(from Gardneria multiflora, structure of)
RN 64494-85-5 CAPLUS
CN Gardneramine oxindole, 16,17-didehydro-17-deoxy- (9CI) (CA INDEX NAME)



IT **64550-58-9**
RL: PRP (Properties)
(mol. structure of)
RN 64550-58-9 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 2',3',6',7',8',8'a-hexahydro-6'-(2-hydroxyethylidene)-9'-(hydroxymethyl)-4,5,7-trimethoxy-, (1'R,3'S,6'Z,7'R,8'aS,9'R)- (9CI) (CA INDEX NAME)

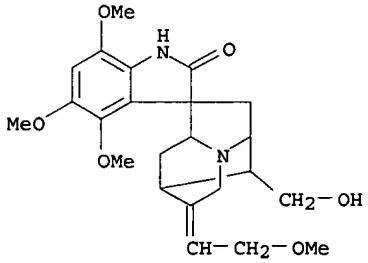


IT **32975-50-1 64494-82-2 64530-48-9**
64550-59-0
RL: RCT (Reactant)

(new Gardneria alkaloid, mol. structure of)

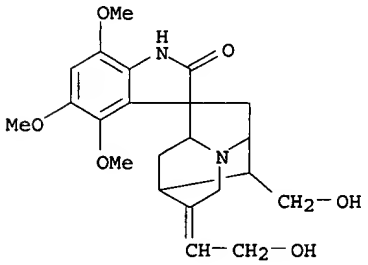
RN 32975-50-1 CAPLUS

CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 2',3',6',7',8',8'a-hexahydro-9'-(hydroxymethyl)-4,5,7-trimethoxy-6'-(2-methoxyethylidene)-, (1'R,3'S,6'Z,7'R,8'aS,9'S)- (9CI) (CA INDEX NAME)



RN 64494-82-2 CAPLUS

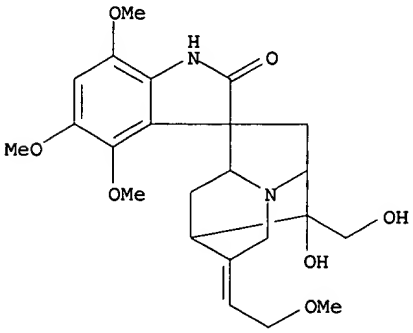
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 2',3',6',7',8',8'a-hexahydro-6'-(2-hydroxyethylidene)-9'-(hydroxymethyl)-4,5,7-trimethoxy-, (1'R,3'S,6'Z,7'R,8'aS,9'S)- (9CI) (CA INDEX NAME)



RN 64530-48-9 CAPLUS

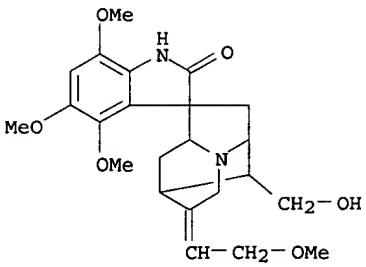
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 2',3',6',7',8',8'a-hexahydro-9'-hydroxy-9'-(hydroxymethyl)-4,5,7-trimethoxy-6'-(2-methoxyethylidene)-, (1'S,3'S,6'Z,7'S,8'aS)- (9CI) (CA INDEX NAME)

Currently available stereo shown.

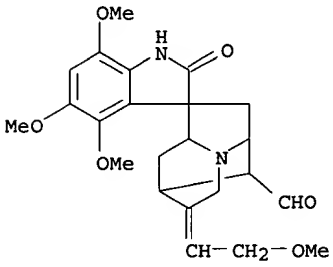


RN 64550-59-0 CAPLUS

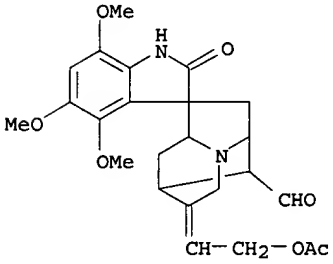
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 2',3',6',7',8',8'a-hexahydro-9'-(hydroxymethyl)-4,5,7-trimethoxy-6'-(2-methoxyethylidene)-, (1'R,3'S,6'Z,7'R,8'aS,9'R)- (9CI) (CA INDEX NAME)



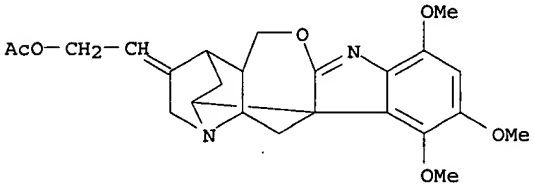
IT **64494-83-3P 64494-84-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and redn. of)
RN 64494-83-3 CAPLUS
CN Gardneramine oxindole, 17-deoxy-17-oxo-, (16R)- (9CI) (CA INDEX NAME)



RN 64494-84-4 CAPLUS
CN Gardneramine oxindole, O18-acetyl-O18-demethyl-17-deoxy-17-oxo-, (16R)-
(9CI) (CA INDEX NAME)

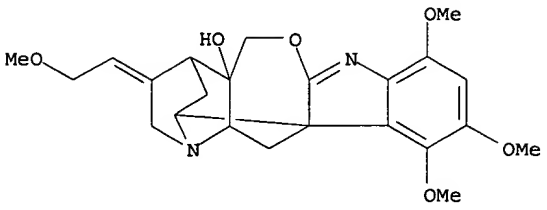


IT **64494-87-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and ring cleavage of)
RN 64494-87-7 CAPLUS
CN Gardneramine oxindole, O18-acetyl-1,2-didehydro-O18-demethyl-2-deoxo-17-
deoxy-2,17-epoxy- (9CI) (CA INDEX NAME)



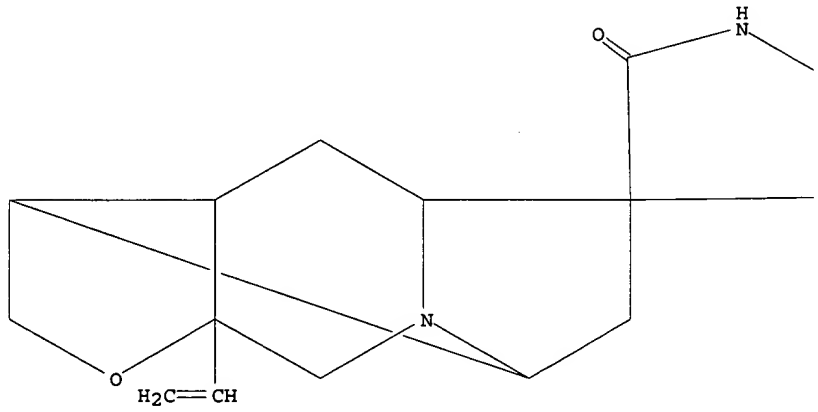
IT **64494-88-8P 64494-90-2P 64494-91-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 64494-88-8 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-2-deoxo-17-deoxy-2,17-epoxy-16-
hydroxy-, (19.xi.)- (9CI) (CA INDEX NAME)

Currently available stereo shown.

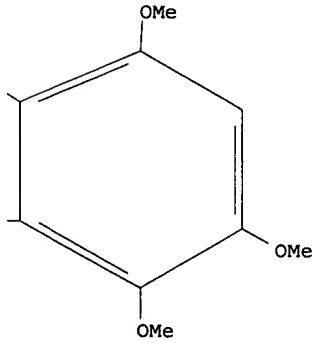


RN 64494-90-2 CAPLUS
CN Gardneramine oxindole, 18,19-didehydro-18-demethoxy-17-deoxy-17,20-epoxy-19,20-dihydro-, (16R,20.beta.)- (9CI) (CA INDEX NAME)

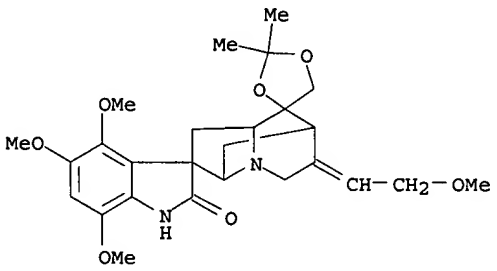
PAGE 1-A



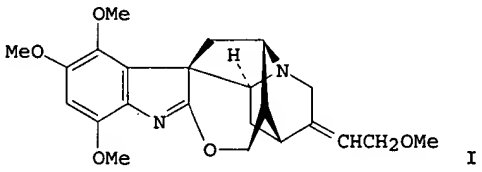
PAGE 1-B



RN 64494-91-3 CAPLUS
CN Gardneramine oxindole, 17-deoxy-16,17-[(1-methylethylidene)bis(oxy)]-, (19.xi.)- (9CI) (CA INDEX NAME)



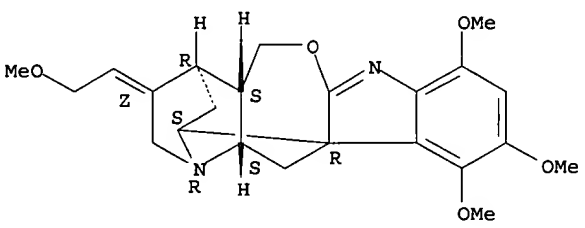
L4 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1976:144859 CAPLUS
DN 84:144859
TI Effect of indole alkaloids from Gardneria genus and Uncaria genus on neuromuscular transmission in the rat limb in situ
AU Harada, Masatoshi; Ozaki, Yukihiro
CS Fac. Pharm. Sci., Univ. Chiba, Chiba, Japan
SO Chem. Pharm. Bull. (1976), 24(2), 211-14
CODEN: CPBTAL
DT Journal
LA English
GI



I

AB Effect of 6 indole alkaloids and 1 synthetic compd. on neuromuscular transmission was examd. in a rat limb prepn. in situ. Gardneramine (I) [**34274-91-4**] inhibited the gastrocnemius contractions elicited by elec. stimulation of the sciatic nerve, but exerted little or no inhibition on the contractions elicited by direct stimulation of the muscle. The inhibitory effect of I was a little stronger than that of hexamethonium bromide [55-97-0] and was very weak when compared with that of d-tubocurarine chloride [57-94-3]. Gardnerine [23172-92-1] augmented both contractions elicited by nerve and muscle stimulation. Gardnutine [23172-98-7], hydroxygardnutine [23173-00-4], hirsutine [7729-23-9], and one synthetic compd. showed a long-lasting depressive effect on both contractions, while isorhynchophylline [6859-01-4] was only slightly effective. These results indicate that only I affects neuromuscular transmission to a large extent.
IT **34274-91-4**
RL: BIOL (Biological study)
(neuromuscular transmission response to)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

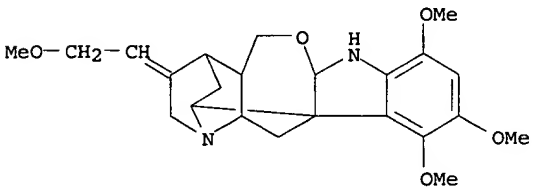
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



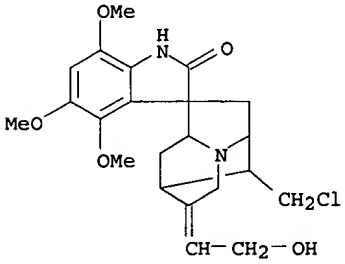
L4 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2002 ACS

09671104

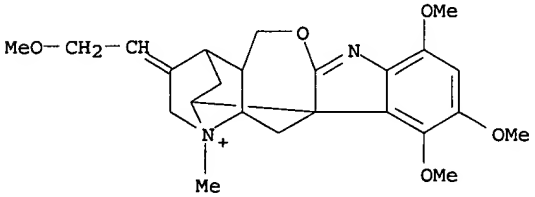
AN 1976:74483 CAPLUS
DN 84:74483
TI Structure of gardneramine and 18-demethylgardneramine
AU Sakai, Shinichiro; Aimi, Norio; Kubo, Akinori; Kitagawa, Masayuki; Hanasawa, Masako; Katano, Kiyoaki; Yamaguchi, Keiichi; Haginiwa, Joju
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO Chem. Pharm. Bull. (1975), 23(11), 2805-17
CODEN: CPBTAL
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Gardneramine, the main alkaloid of Gardneria spp. (Loganiaceae), has structure I. A minor base, alkaloid G, was detd. to be 18-demethylgardneramine (II). Both alkaloids have an iminoether ring as the masked oxindole, some novel reactivities of which were described. Trimethoxyoxindoles (III-V) were synthesized as model compds for locating the arom. substituents of I.
IT **50478-92-7**
RL: RCT (Reactant)
(iodomethylation of)
RN 50478-92-7 CAPLUS
CN Gardneramine oxindole, 2-deoxo-17-deoxy-2,17-epoxy- (9CI) (CA INDEX NAME)



IT **33193-75-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cyclization of)
RN 33193-75-8 CAPLUS
CN Gardneramine oxindole, 17-chloro-O18-demethyl-17-deoxy- (8CI, 9CI) (CA INDEX NAME)



IT **58521-06-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydride redn.)
RN 58521-06-5 CAPLUS
CN Gardneramine oxindolium, 1,2-didehydro-2-deoxo-17-deoxy-2,17-epoxy-4-methyl-, iodide (9CI) (CA INDEX NAME)



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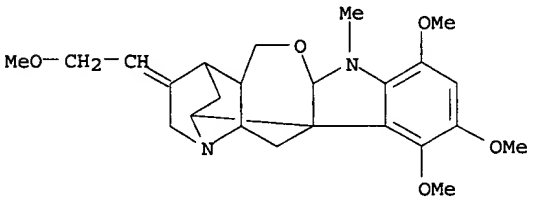
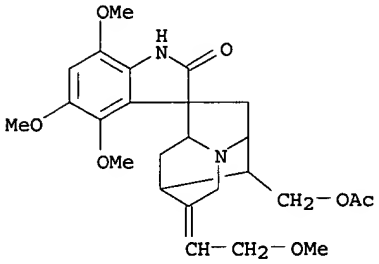
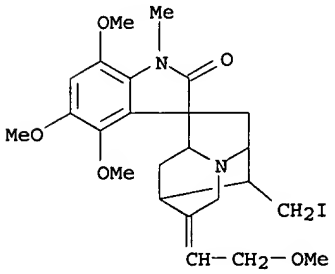
IT **58521-05-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and iodomethylation of)
RN 58521-05-4 CAPLUS
CN Gardneramine oxindole, 2-deoxo-17-deoxy-2,17-epoxy-1-methyl- (9CI) (CA INDEX NAME)



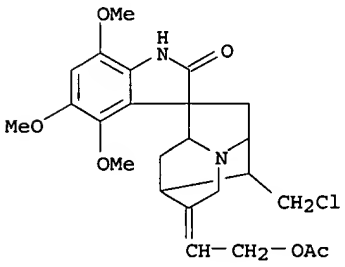
IT **32975-51-2P 32975-52-3P 32975-53-4P**
33193-72-5P 33193-74-7P 58521-07-6P
58521-08-7P 58521-09-8P 58526-64-0P
58560-50-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 32975-51-2 CAPLUS
CN Gardneramine oxindole, acetate (ester) (8CI, 9CI) (CA INDEX NAME)

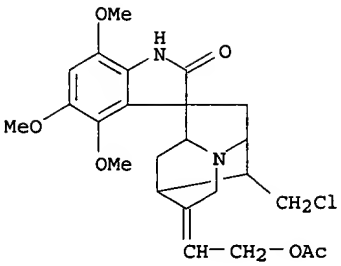


RN 32975-52-3 CAPLUS
CN Gardneramine oxindole, 17-deoxy-17-iodo- (8CI, 9CI) (CA INDEX NAME)

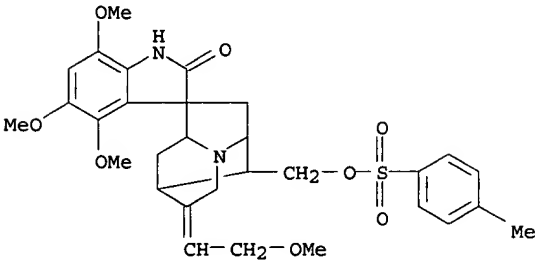


RN 32975-53-4 CAPLUS
CN Gardneramine oxindole, 17-chloro-17-deoxy-, acetate (ester) (8CI, 9CI) (CA INDEX NAME)

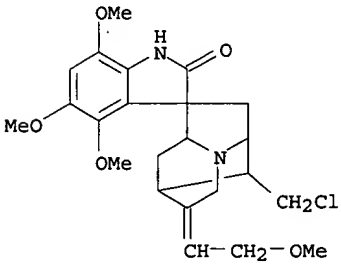




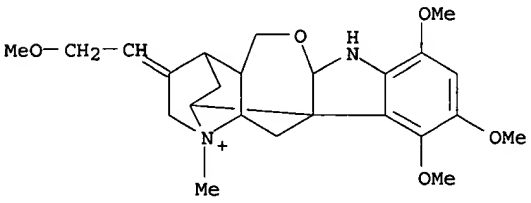
RN 33193-72-5 CAPLUS
CN Gardneramine oxindole, 4-methylbenzenesulfonate (ester) (9CI) (CA INDEX NAME)



RN 33193-74-7 CAPLUS
CN Gardneramine oxindole, 17-chloro-17-deoxy- (8CI, 9CI) (CA INDEX NAME)



RN 58521-07-6 CAPLUS
CN Gardneramine oxindolium, 2-deoxo-17-deoxy-2,17-epoxy-4-methyl-, iodide (9CI) (CA INDEX NAME)



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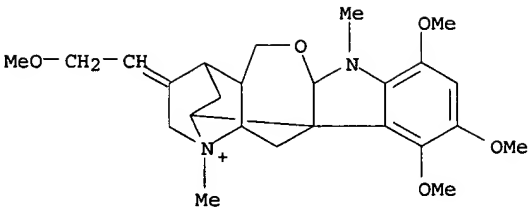
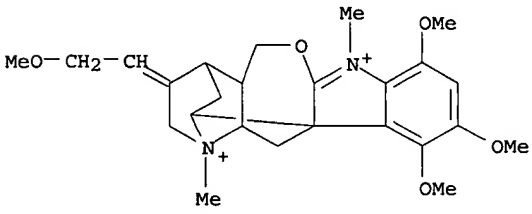
RN 58521-08-7 CAPLUS
CN Gardneramine oxindolium, 2-deoxo-17-deoxy-2,17-epoxy-1,4-dimethyl-, iodide (9CI) (CA INDEX NAME)



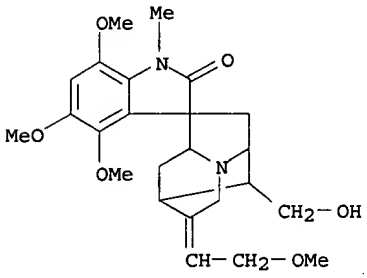
● I^-

RN 58521-09-8 CAPLUS
CN Gardneramine oxindolium, 1,2-didehydro-2-deoxo-17-deoxy-2,17-epoxy-1,4-dimethyl-, diiodide (9CI) (CA INDEX NAME)

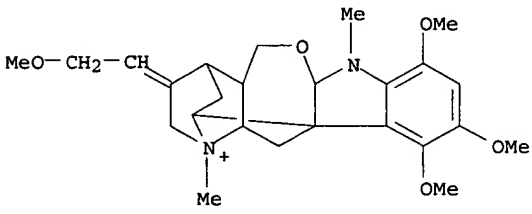


●2 I^-

RN 58526-64-0 CAPLUS
CN Gardneramine oxindole, 1-methyl- (9CI) (CA INDEX NAME)



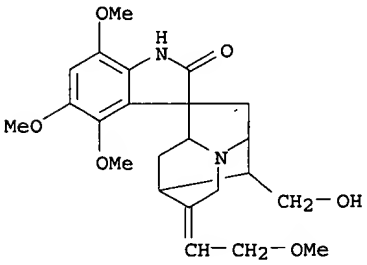
RN 58560-50-2 CAPLUS
CN Gardneramine oxindolium, 2-deoxo-17-deoxy-2,17-epoxy-1,4-dimethyl-, iodide, (2.beta.)- (9CI) (CA INDEX NAME)



● I^-

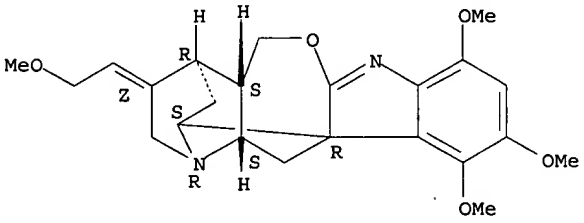
IT **32975-50-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn., acylation and tosylation of)
RN 32975-50-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 2',3',6',7',8',8'a-hexahydro-9'-(hydroxymethyl)-4,5,7-trimethoxy-6'-(2-methoxyethylidene)-, (1'R,3'S,6'Z,7'R,8'aS,9'S)- (9CI) (CA INDEX NAME)

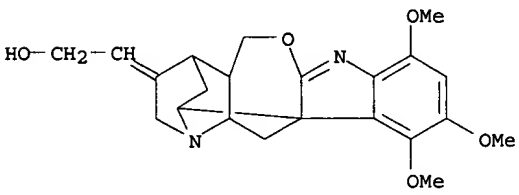


IT **34274-91-4**
RL: PRP (Properties)
(structure of)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



IT **32975-55-6P**
RL: RCT (Reactant); PREP (Preparation)
(synthesis of)
RN 32975-55-6 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-O18-demethyl-2-deoxo-17-deoxy-2,17-epoxy- (9CI) (CA INDEX NAME)



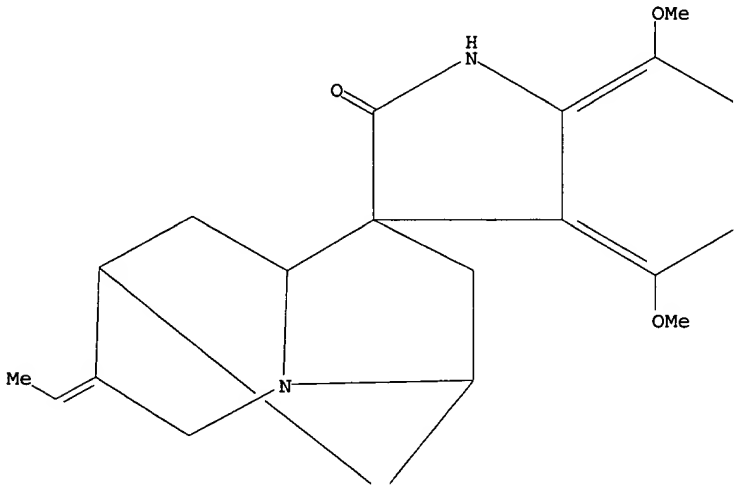
L4 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1975:428419 CAPLUS
DN 83:28419
TI Gardneria alkaloids. X. Structure of gardmultine, a novel bisindole alkaloid
AU Sakai, S.; Aimi, N.; Yamaguchi, K.; Yamanaka, E.; Haginiwa, J.
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO Tetrahedron Lett. (1975), (10), 719-22
CODEN: TELEAY
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB The structure of gardmultine (I), isolated from Gardneria multiflora, was detd. from chem. and spectral data.
IT **56197-32-1**

09671104

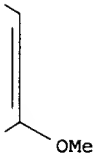
RL: RCT (Reactant)
(new alkaloid from Gardneria multiflora)
RN 56197-32-1 CAPLUS
CN Dispiro[13,8b,10-ethanylylidene-11H-pyrido[2',3':5,6]oxepino[2,3-b]oxazolo[3,2-a]indole-2(3H),9'-[3,7]methanoindolizine-1'(5'H),3''-[3H]indol]-2''(1''H)-one, 6'-ethylidene-2',3',6',7',8',8'a,9,9a,12,13,13a,14-dodecahydro-4'',5,6'',7,7'',8-hexamethoxy-12-(2-methoxyethylidene)-, stereoisomer (9CI) (CA INDEX NAME)

Currently available stereo shown.

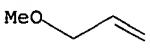
PAGE 1-B



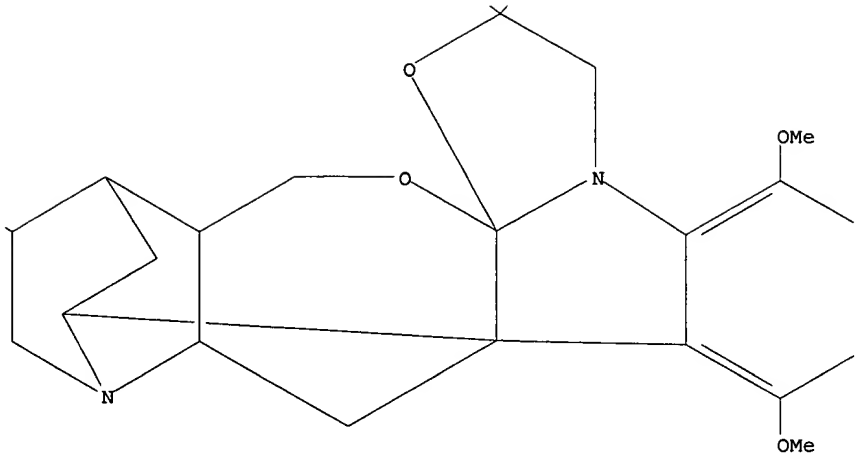
PAGE 1-C



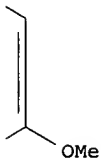
PAGE 2-A



PAGE 2-B

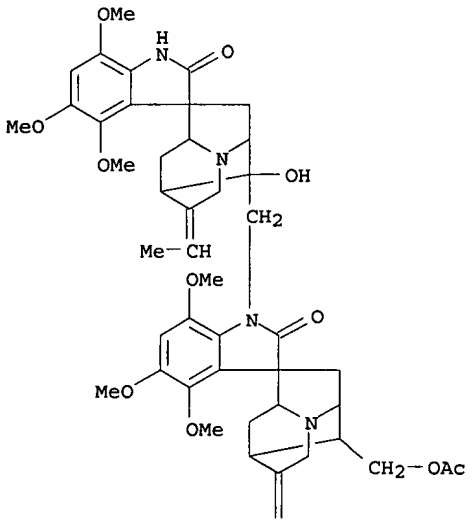


PAGE 2-C

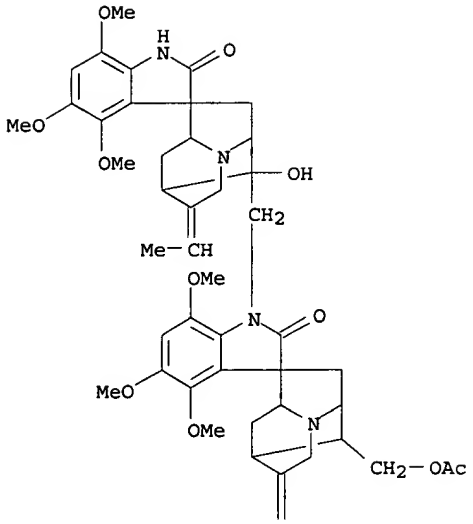


IT **56197-33-2P 56197-34-3P 56197-35-4P**
56197-36-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 56197-33-2 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 18'-demethoxy-17'-deoxy-16'-hydroxy-, 17-acetate, (19'E)- (9CI) (CA INDEX NAME)

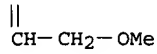
PAGE 1-A



PAGE 1-A

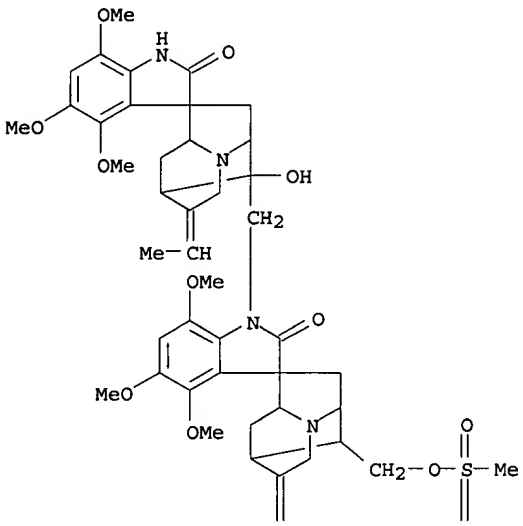


PAGE 2-A

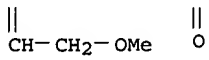


RN 56197-34-3 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 18'-demethoxy-17'-deoxy-16'-hydroxy-, 17-methanesulfonate, (19'E)- (9CI) (CA INDEX NAME)

PAGE 1-A



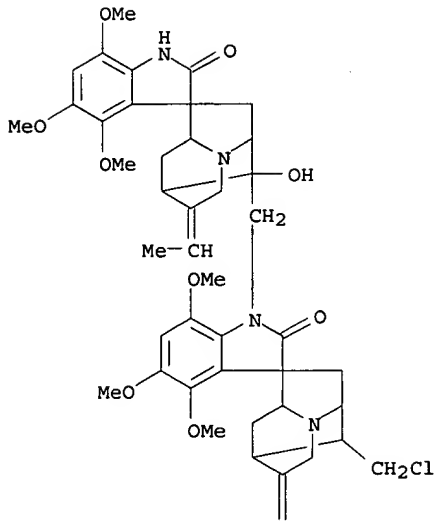
PAGE 2-A



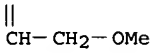
RN 56197-35-4 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 17-chloro-18'-demethoxy-17,17'-dideoxy-16'-hydroxy-, (19'E)- (9CI) (CA INDEX NAME)

09671104

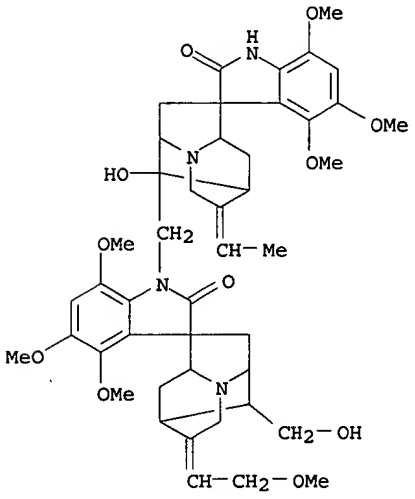
PAGE 1-A



PAGE 2-A



RN 56197-36-5 CAPLUS
CN 1,17'-Bi[gardneramine oxindole], 18'-demethoxy-17'-deoxy-16'-hydroxy-, (19'E)- (9CI) (CA INDEX NAME)



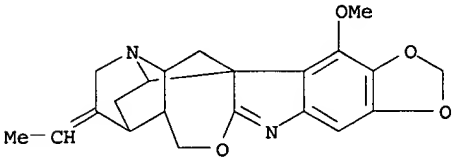
L4 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1975:428408 CAPLUS
DN 83:28408
TI Gardneria alkaloids. IX. Structures of chitosenine and three other minor bases from Gardneria multiflora
AU Sakai, S.; Aimi, N.; Yamaguchi, K.; Ohhira, H.; Hori, K.; Haginiwa, J.
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO Tetrahedron Lett. (1975), (10), 715-18
CODEN: TELEAY
DT Journal
LA English
GI For diagram(s), see printed CA Issue.

09671104

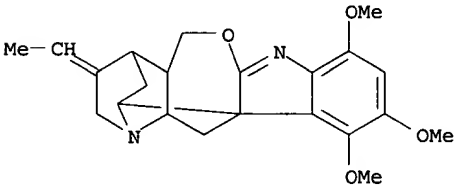
AB The structures of gardfloramine (I), the (E)-ethylidene compd. 18-demethoxygardneramine (II), and 18-demethoxygardfloramine (III), isolated from G. multiflora, were detd. from spectral data. The structure of chitosenine (IV), also from G. multiflora, was detd. from chem. and spectral data.

IT **56198-75-5P 56246-54-9P**
RL: PREP (Preparation)
(from Gardneria multiflora, mol. structure of)

RN 56198-75-5 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-10,12,18-tridemethoxy-2-deoxo-17-deoxy-2,17-epoxy-10,11-[methylenebis(oxy)]-, (19E)- (9CI) (CA INDEX NAME)

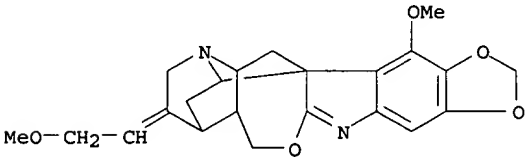


RN 56246-54-9 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-18-demethoxy-2-deoxo-17-deoxy-2,17-epoxy-, (19E)- (9CI) (CA INDEX NAME)

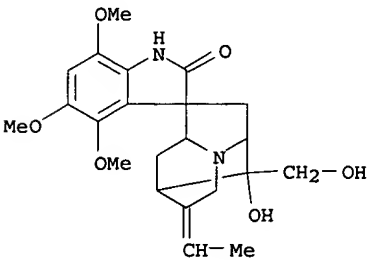


IT **56198-74-4 56210-06-1**
RL: RCT (Reactant)
(new alkaloid from Gardneria multiflora, structure of)

RN 56198-74-4 CAPLUS
CN 8,11,12a-Ethanylylidene-7H-1,3-dioxolo[4,5-f]pyrido[2',3':5,6]oxepino[2,3-b]indole, 7a,8,9,10,11a,12-hexahydro-13-methoxy-9-(2-methoxyethylidene)-, (7aS,8R,9Z,11R,11aS,12aR,14S)- (9CI) (CA INDEX NAME)

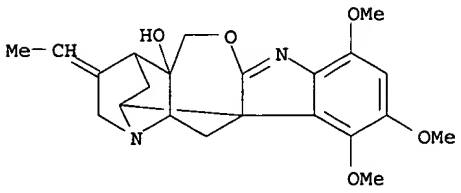


RN 56210-06-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 6'-ethylidene-2',3',6',7',8',8'a-hexahydro-9'-hydroxy-9'-(hydroxymethyl)-4,5,7-trimethoxy-, (1'S,3'S,6'E,7'S,8'aS,9'R)- (9CI) (CA INDEX NAME)

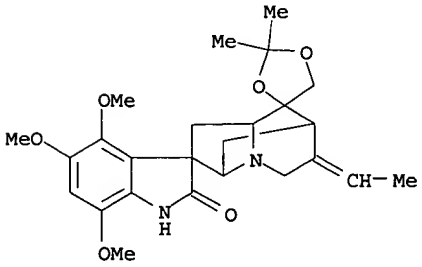


IT **56197-29-6P 56197-30-9P 56197-31-0P**
56210-07-2P 56270-98-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

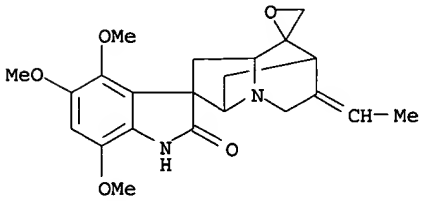
RN 56197-29-6 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-18-demethoxy-2-deoxo-17-deoxy-2,17-epoxy-16-hydroxy- (9CI) (CA INDEX NAME)



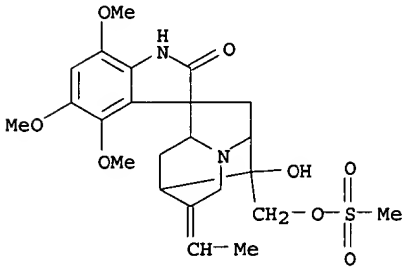
RN 56197-30-9 CAPLUS
CN Gardneramine oxindole, 18-demethoxy-17-deoxy-16,17-[(1-methylethylidene)bis(oxy)]-, (19E)- (9CI) (CA INDEX NAME)



RN 56197-31-0 CAPLUS
CN Gardneramine oxindole, 18-demethoxy-17-deoxy-16,17-epoxy-, (19E)- (9CI) (CA INDEX NAME)

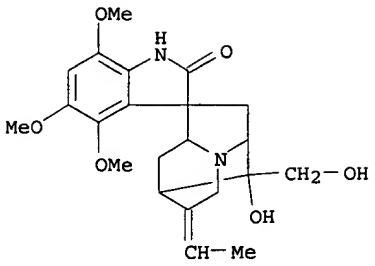


RN 56210-07-2 CAPLUS
CN Gardneramine oxindole, 18-demethoxy-16-hydroxy-, 17-(methanesulfonate), (19E)- (9CI) (CA INDEX NAME)



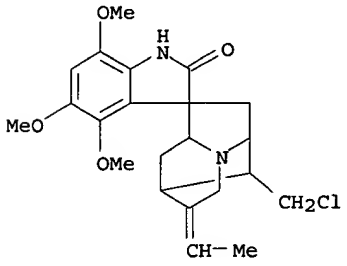
RN 56270-98-5 CAPLUS
CN Gardneramine oxindole, 18-demethoxy-16-hydroxy-, monohydrochloride, (19E)- (9CI) (CA INDEX NAME)

09671104

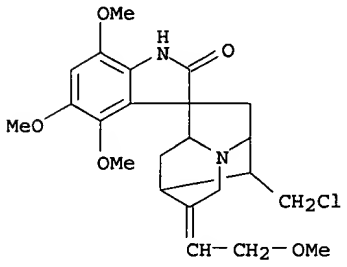


● HCl

L4 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1974:121175 CAPLUS
DN 80:121175
TI Gardneria alkaloids. VIII. Interconversion of gardneria alkaloids and the configuration around C-19 double bond
AU Sakai, Shinichiro; Aimi, Norio; Katano, Kiyoaki; Ohhira, Hiromi; Haginiwa, Joju
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO Yakugaku Zasshi (1974), 94(2), 225-31
CODEN: YKKZAJ
DT Journal
LA Japanese
GI For diagram(s), see printed CA Issue.
AB Hydroxygardnutine (I) was converted to gardnutine (II). The aldehyde III, derived from I, gave abnormal redn. products, IV and V, by the Huang-Minlon method. A similar treatment of VI, formed from gardneramine VII, resulted in the formation of (19Z)-18-demethoxygardneramine. NMR supports configuration of unsatn. at C-19.
IT **52061-57-1**
RL: RCT (Reactant)
(cyclization of)
RN 52061-57-1 CAPLUS
CN Gardneramine oxindole, 17-chloro-18-demethoxy-17-deoxy- (9CI) (CA INDEX NAME)

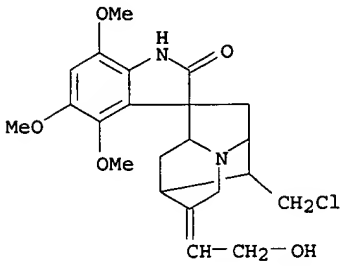


IT **33193-74-7 33193-75-8**
RL: RCT (Reactant)
(methylation of)
RN 33193-74-7 CAPLUS
CN Gardneramine oxindole, 17-chloro-17-deoxy- (8CI, 9CI) (CA INDEX NAME)

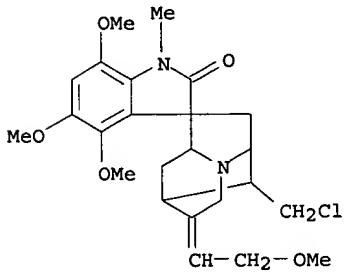


09671104

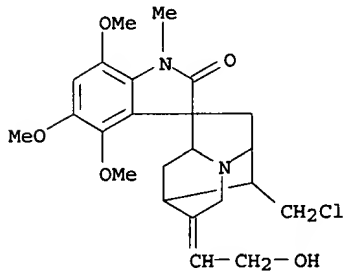
RN 33193-75-8 CAPLUS
CN Gardneramine oxindole, 17-chloro-O18-demethyl-17-deoxy- (8CI, 9CI) (CA INDEX NAME)



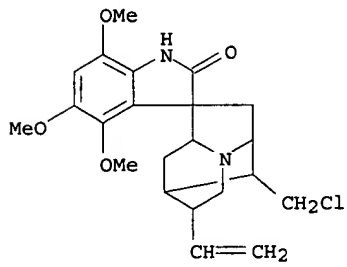
IT **52061-55-9P 52061-56-0P 52061-58-2P**
52061-59-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 52061-55-9 CAPLUS
CN Gardneramine oxindole, 17-chloro-17-deoxy-1-methyl- (9CI) (CA INDEX NAME)



RN 52061-56-0 CAPLUS
CN Gardneramine oxindole, 17-chloro-O18-demethyl-17-deoxy-1-methyl- (9CI) (CA INDEX NAME)

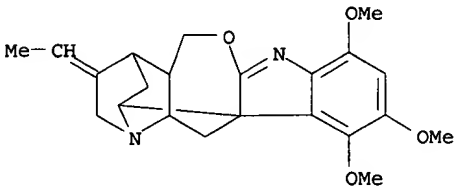


RN 52061-58-2 CAPLUS
CN Gardneramine oxindole, 17-chloro-18,19-didehydro-18-demethoxy-17-deoxy-19,20-dihydro- (9CI) (CA INDEX NAME)

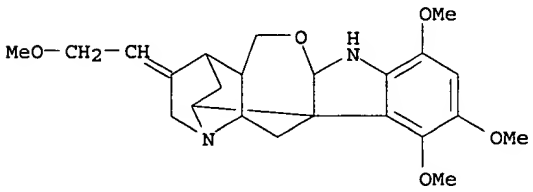


09671104

RN 52061-59-3 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-18-demethoxy-2-deoxo-17-deoxy-2,17-epoxy- (9CI) (CA INDEX NAME)

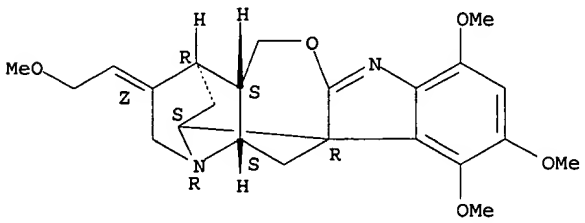


L4 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1973:526686 CAPLUS
DN 79:126686
TI Transformation of indole alkaloids. I. Conversion of oxindole alkaloids into indole alkaloids
AU Aimi, N.; Yamanaka, E.; Endo, J.; Sakai, S.; Haginiwa, J.
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO Tetrahedron (1973), 29(14), 2015-21
CODEN: TETRAB
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB The oxindole alkaloids pteropodine and isorhynchophylline were converted into the corresponding indole alkaloids I and II by formation of imino ethers with Meerwein's reagent, redn. with NaBH4-AcOH to give 2,3-secoindoles, and oxidative cyclization. Yohimbine-oxindole imino ether similarly was converted into yohimbine and pseudoyohimbine.
IT **50478-92-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 50478-92-7 CAPLUS
CN Gardneramine oxindole, 2-deoxo-17-deoxy-2,17-epoxy- (9CI) (CA INDEX NAME)



IT **34274-91-4**
RL: RCT (Reactant)
(redn. of)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

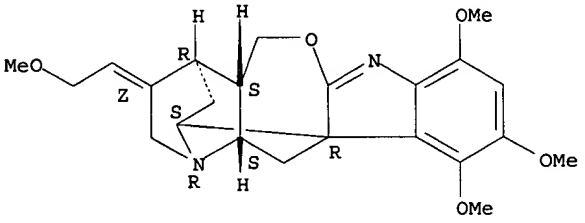


L4 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1973:67103 CAPLUS
DN 78:67103
TI Pharmacological studies on Gardneria alkaloids. II. Peripheral effects.

09671104

Effects on circulatory and digestive systems
AU Harada, Masatoshi; Ozaki, Yukihiro
CS Fac. Pharm. Sci., Univ. Chiba, Chiba, Japan
SO Yakugaku Zasshi (1972), 92(12), 1540-6
CODEN: YKKZAJ
DT Journal
LA Japanese
AB Gardneramine **[34274-91-4]** (4 mg/kg, i.v.) and gardnerine [23172-92-1] (4 mg/kg, i.v.) produced a hypotensive effect in rabbits. This effect seems to be derived from their peripheral vasodilation, action direct depressive action on the myocardium, and central depressive action. Both alkaloids produced vasodilation in the hind limb prepn. from dogs and a depressive effect on atria isolated from guinea pigs. Gardneramine inhibited the movement of smooth muscle organs such as stomach and intestine. In contrast gardnerine accelerated this movement at low doses, but inhibited it at high doses. Both alkaloids apparently have a papaverine-like action in peripheral organs.
IT **34274-91-4**
RL: BIOL (Biological study)
(pharmacol. of)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



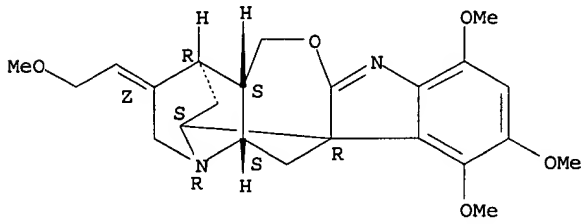
L4 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1972:42002 CAPLUS
DN 76:42002
TI Pharmacological studies on Gardneria alkaloids. I. Central effects
AU Harada, Masatoshi; Ozaki, Yukihiro; Murayama, Satoshi; Sakai, Shinichiro; Haginiwa, Joju
CS Fac. Pharm. Sci., Univ. Chiba, Chiba, Japan
SO Yakugaku Zasshi (1971), 91(9), 997-1003
CODEN: YKKZAJ
DT Journal
LA Japanese
AB Gardneramine (I) **[34274-91-4]** and gardnerine (II) [23172-92-1], exhibited central nervous system depressant activity in mice, the central activity and acute toxicity of the former being greater. The Gardneria alkaloids had a slight analgesic effect and antagonized convulsions induced by nicotine [54-11-5]. Depression of spontaneous motor activity, a weak antagonistic effect on hypermotility induced by methamphetamine [537-46-2], motor incoordination, prolongation of hexobarbital [50-09-9]-sleeping time, and a hypothermic effect were seen following the administration of I (40 mg/kg, i.p.) or II (80 mg/kg, i.p.).
IT **11052-11-2**
RL: BIOL (Biological study)
(nervous system pharmacol. of)
RN 11052-11-2 CAPLUS

L4 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1971:477117 CAPLUS
DN 75:77117
TI Gardneria alkaloids. VII. Crystal structure of gardneramine cyanobromide
AU Aimi, N.; Sakai, S.; Iitaka, Y.; Itai, A.
CS Fac. Pharm. Sci., Univ. Tokyo, Tokyo, Japan
SO Tetrahedron Lett. (1971), (23), 2061-4
CODEN: TELEAY
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB The structure of gardneramine (I) was confirmed by x-ray crystallog. of

its cyanobromide (II) having space group P212121, a 12.24, b 25.70, c 7.34 .ANG., dcalcd. 1.497; dobsd. 1.500, Z 4. The geometry of the exocyclic double bond is Z, in contrast to that of gardnerine and gardnutine, which coexist in the same plant.

IT **34274-91-4**
RL: PRP (Properties)
(structure and abs. configuration of)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

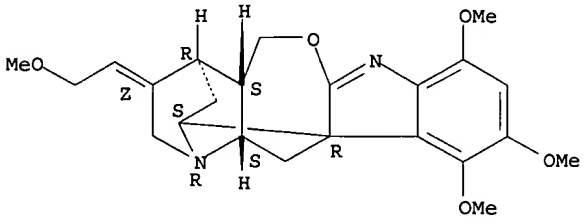
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



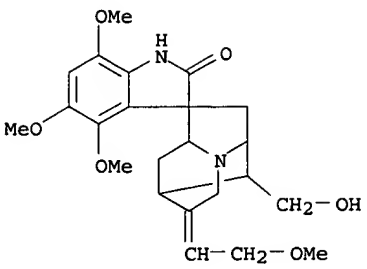
L4 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1971:464069 CAPLUS
DN 75:64069
TI Gardneria alkaloids. VI. Structures of gardneramine and alkaloid G (demethylgardneramine)
AU Sakai, S.; Aimi, N.; Kubo, A.; Kitagawa, M.; Shiratori, M.; Haginiwa, J.
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO Tetrahedron Lett. (1971), (23), 2057-60
CODEN: TELEAY
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Gardneramine has structure I, comparable with the alkaloid G (II) (authors, 1970); chem. and spectral (ir, mass, NMR) data are given.

IT **34274-91-4**
RL: RCT (Reactant)
(alkaloid from Gardneria mutans, structure of)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

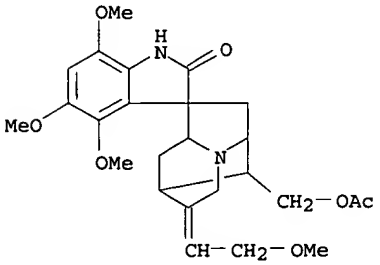
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



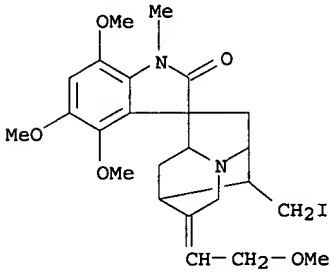
IT **32975-50-1P 32975-51-2P 32975-52-3P**
32975-53-4P 32975-55-6P 33193-72-5P
33193-73-6P 33193-74-7P 33193-75-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 32975-50-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizin]-2(1H)-one, 2',3',6',7',8',8'a-hexahydro-9'-(hydroxymethyl)-4,5,7-trimethoxy-6'-(2-methoxyethylidene)-, (1'R,3'S,6'Z,7'R,8'aS,9'S)- (9CI) (CA INDEX NAME)



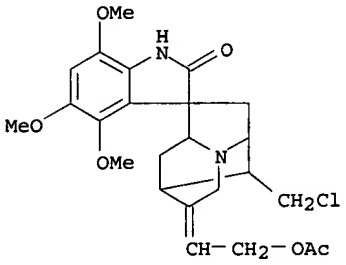
RN 32975-51-2 CAPLUS
CN Gardneramine oxindole, acetate (ester) (8CI, 9CI) (CA INDEX NAME)



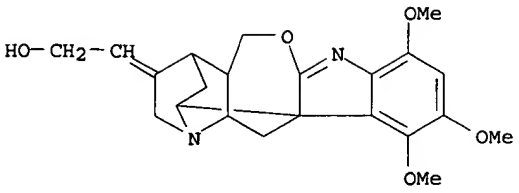
RN 32975-52-3 CAPLUS
CN Gardneramine oxindole, 17-deoxy-17-iodo- (8CI, 9CI) (CA INDEX NAME)



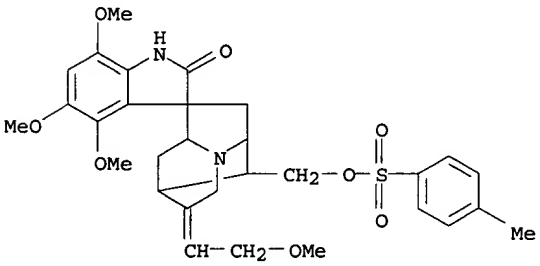
RN 32975-53-4 CAPLUS
CN Gardneramine oxindole, 17-chloro-17-deoxy-, acetate (ester) (8CI, 9CI) (CA INDEX NAME)



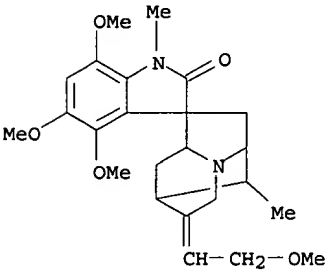
RN 32975-55-6 CAPLUS
CN Gardneramine oxindole, 1,2-didehydro-O18-demethyl-2-deoxo-17-deoxy-2,17-epoxy- (9CI) (CA INDEX NAME)



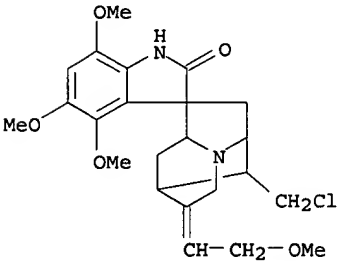
RN 33193-72-5 CAPLUS
CN Gardneramine oxindole, 4-methylbenzenesulfonate (ester) (9CI) (CA INDEX NAME)



RN 33193-73-6 CAPLUS
CN Gardneramine oxindole, 17-deoxy- (8CI) (CA INDEX NAME)

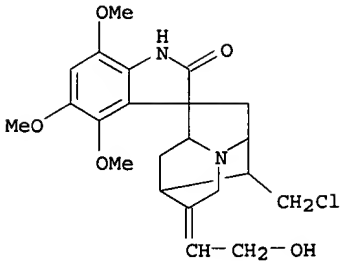


RN 33193-74-7 CAPLUS
CN Gardneramine oxindole, 17-chloro-17-deoxy- (8CI, 9CI) (CA INDEX NAME)



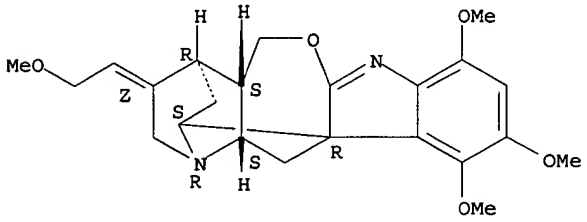
RN 33193-75-8 CAPLUS
CN Gardneramine oxindole, 17-chloro-O18-demethyl-17-deoxy- (8CI, 9CI) (CA INDEX NAME)

09671104



L4 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1971:436401 CAPLUS
DN 75:36401
TI Steroid alkaloids. CXXII. Reduction of the conanine steroid imine derivative by lithium tetrahydro aluminate and sodium borohydride
AU Milliet, P.; Picot, A.; Lusinchi, X.
CS Inst. Chim. Subst. Nat., CNRS, Gif-sur-Yvette, Fr.
SO Tetrahedron Lett. (1971), (17), 1195-8
CODEN: TELEAY
DT Journal
LA French
GI For diagram(s), see printed CA Issue.
AB Redn. of conanine imine deriv. (I) in THF with LiAlH4 under N gave variable amts. of (II), (III), or (IV), depending on the redn. time. Thus, I was treated with excess LiAlH4 for 15 min to give II 43, III 18, IV 30, and I 9%, compared to 17% III and 83% IV in 96 hr. IV was obtained quant. when I was reduced 3 hr in MeOH with NaBH4. The mechanism of the redn. was discussed. In NaBH4 redns., an aminobornane deriv. of III was detected in the products.
IT **34274-91-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 34274-91-4 CAPLUS
CN 4,1,11b-Ethanylylidene-2H-pyrido[2',3':5,6]oxepino[2,3-b]indole, 3,4,4a,5,12,12a-hexahydro-8,10,11-trimethoxy-3-(2-methoxyethylidene)-, (1R,3Z,4R,4aS,11bR,12aS,13S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

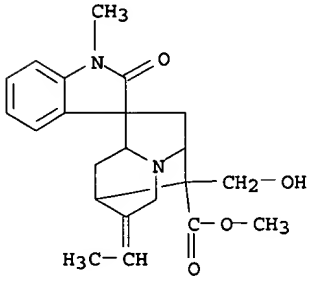


L4 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1971:406161 CAPLUS
DN 75:6161
TI Indole alkaloids. XXV. Oxidation of voachalotine with potassium dichromate
AU Braekman, J. C.; Kaisin, M.; Pecher, J.
CS Fac. Sci., Univ. Libre Bruxelles, Brussels, Belg.
SO Bull. Soc. Chim. Belg. (1970), 79(11-12), 665-77
CODEN: BSCBAG
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Voachalotine (I, R1 = H2, R2 = CH2OH, R3 = H) (II), the major alkaloid of Voacanga chalotiana, with K2Cr2O7 gave a cyclic ether (III) of dehydrovoachalotine and trace amts. of voachalotine oxindole (IV, R1 = Me, R2 = CH2OH) (V) and 6-oxovoachalotine (I, R1 = O, R2 = CH2OH, R3 = OH) (VI). Further oxidn. in AcOH of III gave dehydrovoachalotine pseudoindoxyl (VII, R = Me) (VIII), dehydropolyneuridine pseudoindoxyl (VII, R = H) (IX), and dehydrovoachalotine oxindole (X). Oxidn. of II N-oxide with K2Cr2O7 without added AcOH also gave III, V, and VI. Oxidn.

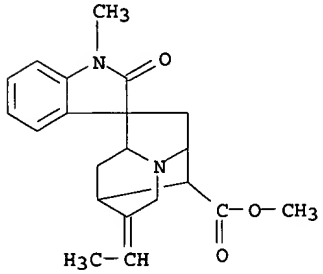
of dehydroxymethylvoachalotine (I, R1 = H2, R2 = R3 = H) in dil. AcOH gave 6-oxodehydroxymethylvoachalotine (I, R1 = O, R2 = R3 = H), dehydroxymethylvoachalotine oxindole (IV, R1 = Me, R2 = H) (also obtained by retroaldolization of natural voachalotine oxindole), and dehydroxymethylpolyneuridine oxindole (IV, R1 = R2 = H). No pseudoindoxyl derivs. were detected.

IT **26126-84-1P 26126-87-4P 32303-66-5P**
32303-70-1P 32326-32-2P 32487-54-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

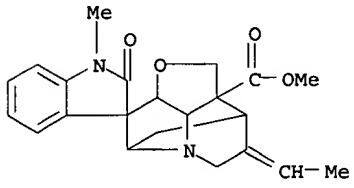
RN 26126-84-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizine]-9'-carboxylic acid, 6'-ethylidene-1,2,2',3',6',7',8',8'a-octahydro-9'-(hydroxymethyl)-1-methyl-2-oxo-, methyl ester, (1'S,3'S,6'E,7'S,8'aS,9'R)- (9CI) (CA INDEX NAME)



RN 26126-87-4 CAPLUS
CN Voachalotine oxindole, 16-de(hydroxymethyl)- (8CI) (CA INDEX NAME)

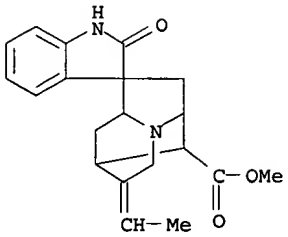


RN 32303-66-5 CAPLUS
CN Spiro[3H-indole-3,8'(7'H)-[3,7]methano[2H]furo[4,3,2-hi]indolizine]-2'a(3'H)-carboxylic acid, 4'-ethylidene-1,2,4',5',8'a,8'b-hexahydro-1-methyl-2-oxo-, methyl ester, (2R,2'aR,3'S,4'E,7'S,8'aR,8'bR)- (9CI) (CA INDEX NAME)

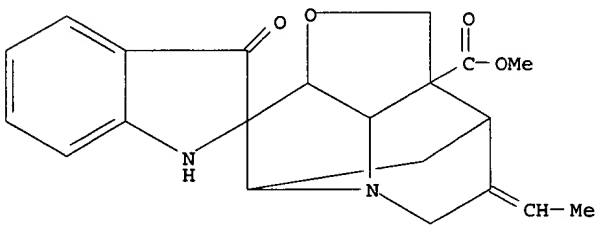


RN 32303-70-1 CAPLUS
CN Polyneuridine oxindole, de(hydroxymethyl)- (8CI) (CA INDEX NAME)

09671104

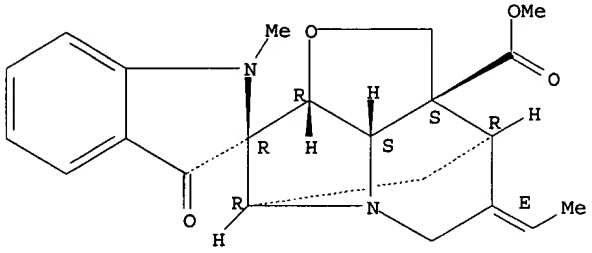


RN 32326-32-2 CAPLUS
CN Spiro[2H-indole-2,8'(7'H)-[3,7]methano[2H]furo[4,3,2-hi]indolizine]-2'a(3'H)-carboxylic acid, 4'-ethylidene-1,3,4',5',8'a,8'b-hexahydro-3-oxo-, methyl ester, (2S,2'aS,3'S,4'E,7'S,8'aS,8'bR)- (9CI) (CA INDEX NAME)



RN 32487-54-0 CAPLUS
CN Spiro[2H-indole-2,8'(7'H)-[3,7]methano[2H]furo[4,3,2-hi]indolizine]-2'a(3'H)-carboxylic acid, 4'-ethylidene-1,3,4',5',8'a,8'b-hexahydro-1-methyl-3-oxo-, methyl ester, (2R,2'aS,3'R,4'E,7'R,8'aR,8'bS)- (9CI) (CA INDEX NAME)

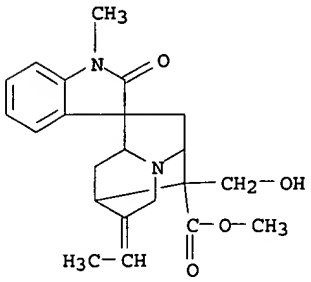
Absolute stereochemistry.
Double bond geometry as shown.



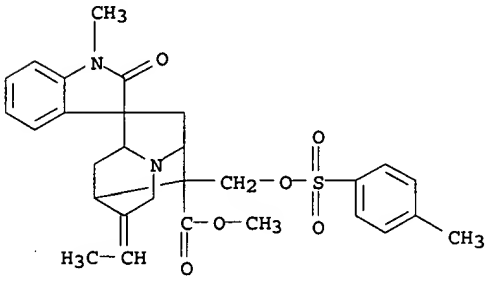
L4 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1970:401003 CAPLUS
DN 73:1003
TI Gardneria alkaloids. IV. Comparative study of alkaloids on Gardneria nutans Sieb. et Zucc., G. multiforia Makino, G. shimadai Hayata and so-called G. insularis Nakai
AU Haginiwa, Joju; Sakai, Shinichiro; Kubo, Akinori; Takahashi, Katsuhiro; Taguchi, Minoru
CS Fac. Pharm. Sci., Chiba Univ., Chiba, Japan
SO Yakugaku Zasshi (1970), 90(2), 219-23
CODEN: YKKZAJ
DT Journal
LA Japanese
AB Three unknown alkaloids, E, C45H54O10N4, F, C22H28O6N2, and G, C22H26O5N2, and a known alkaloid, gardneramine, were isolated from G. multiforia and G. shimadai. Four known indole alkaloids, gardnerine, gardnutine, hydroxygardnutine, and gardneramine were isolated from the so-called G. insularis. From chemotaxonomic studies, these plants were classified into 2 groups, G. nutans and G. insularis, and G. multiforia and G. shimadia, by comparing with G. nutans.
IT **11052-11-2**
RL: BIOL (Biological study)
(of Gardneria, taxonomy in relation to)
RN 11052-11-2 CAPLUS

09671104

L4 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1970:55719 CAPLUS
DN 72:55719
TI Indole alkaloids. XX. Isolation and structural elucidation of four minor alkaloids from Voacanga chalotiana
AU Braekman, J. C.; Tirions-Lampe, M.; Pecher, J.
CS Univ. Libre Bruxelles, Brussels, Belg.
SO Bull. Soc. Chim. Belg. (1969), 78(9-10), 523-38
CODEN: BSCBAG
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Isolation and structural detn. of 4 new minor alkaloids:polyneuridine (I), akuammidine (II), and two new oxygenated derivs. of voachalotine (II I), voachalotine oxindole (IV) and 21(.RTM.)-hydroxyvoachalotine (V) is described. All were obtained from fraction D of the countercurrent distribution of the totum of V. chalotiana by further CCD sepn. and (or) by chromatog. I and II are already known and have been purified as their corresponding O-acetyl derivs. (VI and VII). IV, m. 280-1, [.alpha.]D -33.degree. .+-. 2.degree. (CHCl3), is a new compd. Catalytic hydrogenation of IV yields VIII. The redn. is stereospecific as only one dihydro compd. is obtained. Bromination of IV with pyridinium bromide perbromide gives an unstable c ompd. VIII yields the stable IX. Treated with NaOMe in MeOH, IV gives an acid which after isolation , is esterified by CH2N2. X is a dehydroxymethyl deriv. of IV. Definite evidence in favor of the structure of IV is provided by the pre pn. of IV by oxidn. of III with K2Cr2O7 in aq. soln. Similarly, oxidn. of XI gave X which is identical with the retroaldol c ondensation product of IV. The last isolated alkaloid (V) has spectral properties similar to those o f III but is more polar. A comparison of the mass spectra of IV, XII and X with the spectra o f III, XIII, and XI, is made. The close fragmentation analogy between III and IV, XIII and XI I, XI and X suggests that these compds. have the same quinuclidine s ystems and that the extra O atom is bonded to the aromatic part. The structures of the compds. are given.
IT **26126-84-1**
RL: RCT (Reactant)
(new alkaloid from Voacanga chalotiana, structure of)
RN 26126-84-1 CAPLUS
CN Spiro[3H-indole-3,1'(5'H)-[3,7]methanoindolizine]-9'-carboxylic acid, 6'-ethylidene-1,2,2',3',6',7',8',8'a-octahydro-9'-(hydroxymethyl)-1-methyl-2-oxo-, methyl ester, (1'S,3'S,6'E,7'S,8'aS,9'R)- (9CI) (CA INDEX NAME)

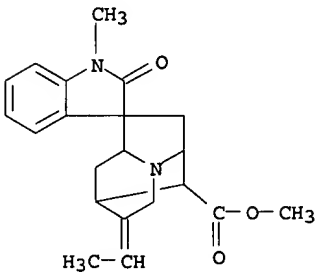


IT **26126-86-3P 26126-87-4P 26144-10-5P**
27123-64-4P 29019-57-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 26126-86-3 CAPLUS
CN Voachalotine oxindole, p-toluenesulfonate (ester) (8CI) (CA INDEX NAME)

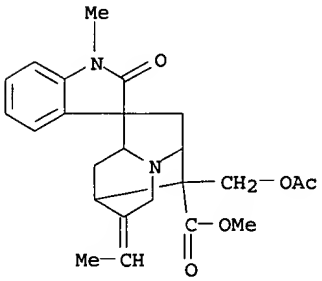


09671104

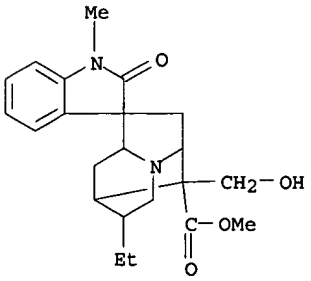
RN 26126-87-4 CAPLUS
CN Voachalotine oxindole, 16-de(hydroxymethyl)- (8CI) (CA INDEX NAME)



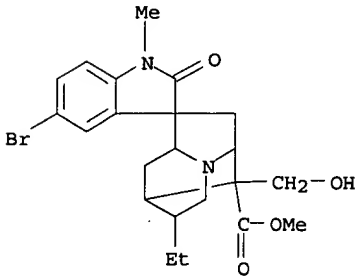
RN 26144-10-5 CAPLUS
CN Voachalotine oxindole, acetate (ester) (8CI) (CA INDEX NAME)



RN 27123-64-4 CAPLUS
CN Voachalotine oxindole, 19,20-dihydro- (8CI) (CA INDEX NAME)



RN 29019-57-6 CAPLUS
CN Voachalotine oxindole, 10-bromo-19,20-dihydro- (8CI) (CA INDEX NAME)



L4 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2002 ACS
AN 1968:419365 CAPLUS
DN 69:19365
TI Alkaloids of Gardneria nutans
AU Aginiwa, Joju; Sakai, Shinichiro; Kubo, Akinori; Hamamoto, Takenori

09671104

CS Univ. Chiba, Chiba, Japan
SO Yakugaku Zasshi (1967), 87(12), 1484-8
CODEN: YKKZAJ
DT Journal
LA Japanese
AB Four new alkaloids named gardneramine (I), gardnutine (II), gardnerine (III), and hydroxygardnutine (IV) were isolated from G. nutans. Thus, 38.5 kg. pulverized stem and root of the plant is continuously extd. with hot MeOH for 3 days three times, the ext. filtered, the filtrate evapd. in vacuo, the sirupy ext. extd. with 3% HCl, the ext. made alk. with 28% NH4OH, extd. with CHCl3 contg. 5-10% MeOH, washed with H2O, dried, and evapd., the residue dissolved in CHCl3 contg. 10% MeOH and extd. with 2% NaOH, the ext. extd. with CHCl3, the ext. evapd., the residue dissolved in warm AcOH, H2O added to make 10% AcOH soln., the soln. filtered, the filtrate made alk. with NH4OH, extd. with CHCl3 contg. 10% MeOH, washed with H2O, and evapd., and the residue chromatographed on Al2O3 to give 9.343 g. I, m. 133-4.degree., [.alpha.]25D -287.7.degree. (MeOH), supposedly C23H28O5N2 (perchlorate m. >300.degree.); 0.794 g. II, m. 319-21.degree., [.alpha.]25D 30.3.degree. (pyridine), supposedly C20H22O2N2 (methiodide m. 277-8.degree.); 13.899 g. III, m. 243-4.degree., [.alpha.]25D -29.4.degree. (MeOH), supposedly C20H24O2N2.tplbond.H2O (methiodide m. 171-2.degree.; picrate m. 204-5.degree.); and 1.328 g. IV, m. 311-13.degree., [.alpha.]25D 36.2.degree. (pyridine), supposedly C20H22O3N2 (methiodide m. 258-61.degree.).
IT **11052-11-2**
RL: RCT (Reactant)
(new alkaloid from Gardneria nutans)
RN 11052-11-2 CAPLUS